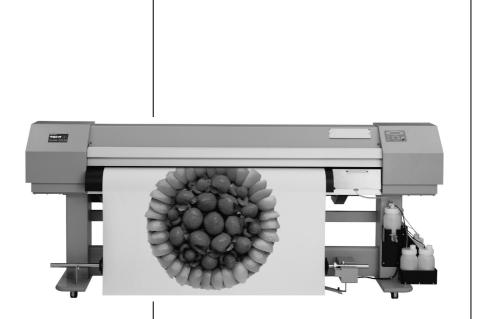# MUTOH

User's Guide

Grand-Format Inkjet Printer

PJ-1614NXE
PJ-2216NXE

Read This Manual Before Using The Equipment.

| Rev. | PJ16E-A-00 |

PJ-1614NXE PJ-2216NXE OPERATION MANUAL ERRATA

Some contents of the Operation Manual are changed.

Make sure the following list shown below.

Page	Item	Description
p.2-4	Modify the list in "2.3.2 Rear section (PJ-1614 NXE)"	**Delete:** No.8 Dumper
p.2-7	Modify the description of "Right of 4th line" in "2.4.1 Normal"	**False:** Displays the remaining amount of roll media... **True:** Displays the <u>approximate</u> remaining amount of roll media...
p.3-8	Modify the procedure in "3.4.1 Turning the power ON"	Refer to sheet 5 6
p.3-9 p.3-11	Modify the procedure in "3.4.2 Turning the power OFF"	Refer to sheet 7 11
p.3-13 p.3-14	Modify the procedure in "3.5 Refilling the ink – Jet wash fluid"	Refer to sheet 12 13
p.3-18	Modify the following items in "3.6.1 Attaching roll media (PJ-1614NXE)" **NOTE**	**Delete:** The printable side of the roll media must be on the outside.
p.3-19	Modify the procedure	Refer to sheet 14 15
p.3-22 p.3-25	Modify the following items in "3.6.2 Loading roll media (PJ-1614NXE)" Add the description shown in the right to **NOTE** in Step 2	When using the roll media such as the printable side is inside: Set media detection to "OFF" ☞4.4.40 Media detection menu
	Modify the procedure	Refer to sheet 16 18
p.3-27	Modify the following items in "3.6.3 Attaching roll media (PJ-2216NXE)" **NOTE**	**Delete:** The printable side of the roll media must be on the outside.
	Modify the procedure	Refer to sheet 19
p.3-30	Add the description shown in the right to **NOTE** in Step 2 in "3.6.4 Loading roll media (PJ-2216NXE)"	When using the roll media such as the printable side is inside: Set media detection to "OFF" ☞4.4.40 Media detection menu

Page	Item	Description
p.3-34 p.3-35	Modify the following items in "3.6.5 Setting winding unit" Step 3	False: Pull out the roll media from the feed slot, and fix into place with tape <u>so that the leading edge is parallel with the media tube.</u> True: Pull out the roll media from the feed slot, <u>obtain a uniform tension, and then fix the end of the media to the media tube.</u>
	Add (**NOTE**)	Refer to sheet 20
p.3-36 p.3-37	Modify the procedure in "3.6.6 Setting media type"	Refer to sheet 21
p.3-41	Modify the procedure in "3.7 Head cleaning before printing"	Refer to sheet 22　23
p.3-45 p.3-46	Modify the procedure in"3.8.3 Alignment"	Refer to sheet 24
p.3-47 p.3-48	Delete "3.8.5 Maintenance record"	
p.4-6	Modify No.10 in "4.3.5 Criteria for the media feed"	False: Printable side with inboard <u>should not be allowed</u> True: Printable side with inboard <u>is not guaranteed</u>
p.4-8	Add "4.3.7 Installing media holder plate"	Refer to sheet 25　26
p.4-11	Modify the setup items of the Setup menu (5/5) in "4.4.1 Setup menu"	Refer to sheet 27
p.4-12	Modify the descriptions in "4.4.2 Origin setup menu"	Refer to sheet 28
p.4-14	Modify the descriptions in "4.4.5 Media type menu"	Refer to sheet 29
p.4-15	Modify the descriptions in "4.4.6 User media menu"	Refer to sheet 30
p.4-17	Modify the parameters in "4.4.10 Thickness menu"	False: 50μ m <u><300μ m></u> 1500μ m True: 50μ m <u><100μ m></u> 1000μ m
p.4-18	Modify the parameters in "4.4.12 Dryer menu"	False: OFF/50 <60 > <u>80 </u> True: OFF/50 <60 > <u>70 </u>
p.4-25	Modify the parameters in "4.4.27 Online timeout menu"	False: OFF/2sec <u><30sec></u> 800sec True: <u>< OFF></u>/2sec 30sec 800sec
p.4-30 p.4-31	Modify the descriptions in "4.4.38 Utility menu"	Refer to sheet 31

Page	Item	Description
p.4-33	Add [NOTE] to "4.4.43 Negative pressure pump menu"	[NOTE] ● Adjust the working pressure of the negative pressure pump when: Printing becomes smeared or misprinted and cannot be corrected by performing head cleaning; increase the parameter Ink drips from the print head face during ink replenishment; decrease the parameter
p.4-34	Add [NOTE] to "4.4.45 Write mode menu"	[NOTE] ● When writing drawing data onto hard disks, the media must be set. Plotting data is processed according to the size of the set media. If media is not set, plotting data cannot be written on the disks.
p.4-35	Add [NOTE] to "4.4.46 re-plot menu"	[NOTE] ● When the plotting data is re-plotted, set media of the same size of the media used when writing the plotting data. Regardless of the size of the set media, the plotted data is plotted in the same size used for the original media.
p.4-36	Add [NOTE] to "4.4.47 File delete menu"	[NOTE] ● Once files are deleted in the file deletion items, they cannot be restored. If the deleted files are needed for reuse, load the plotting data from the computer to the hard disk again.
p.4-37	Add [NOTE] to "4.4.48 Re-name menu"	[NOTE] ● The file name of the plotting data that is loaded from the computer is always named "TEMPFILE000". To save the loaded plotting data, change its file name in the rename entry before loading the next plotting data.
p.4-46	Add "4.4.64 Winding Unit Menu"	Refer to sheet 32
p.4-46	Add "4.4.65 Send Roll menu"	Refer to sheet 32
p.4-46	Add "4.4.66 Maintenance record menu	Refer to sheet 34 35
p.4-48 p.4-49	Modify the procedure in "4.5.3 Winding the roll media"	Refer to sheet 36

| Page	Item	Description

p.4-49	Modify the following items in "4.5.4 Head cleaning" Headline	False: If the printed screen is smeared or misprinted, perform cleaning of the print head surface and the nozzles (head cleaning).
		
		True: Clean the print head surface and the nozzles (head cleaning) when:
		   Printing becomes smeared or misprinted
		   Waiting mode lasts over 1 hour with the power source supplied

	Add (NOTE) in Step 2	**NOTE** ● If printing problems are not corrected by increasing purge mode to "high", clean off the print head surface using a poly-nit wiper soaked in jet wash fluid then perform head cleaning again.
p.5-9 p.5-11	Modify "5.2.3 Replacement of the ink filter"	Refer to sheet 37
p.5-11	Add "5.2.4 Replacement of the print head and CR motor"	Refer to sheet 38 39

p.5-12	Modify the second term of ⚠ CAUTION in "5.3 Cleaning the printer"	**⚠ CAUTION**
		● Do not use the jet-wash fluid, thinner, Benzene, alcohol, or other active agents except for the following parts:
		   Inside the maintenance cover
		   Print head surface
		Doing so may result a malfunction in the product.

p.5-13	Modify "(1) Cleaning interval" in "5.3.2 Cleaning inside the printer"	False: Clean once a <u>month</u>. True: Clean once a <u>week</u>.
p.5-18 p.5-20	Modify the following items in "5.4 Long term storage cleaning" "(1) Cleaning interval"	False: When not using the unit for over <u>2 weeks...</u> True: When not using the unit for over <u>a week...</u>
	"(2) Cleaning procedure"	Refer to sheet 40 42
p.6-8 p.6-9	Add the descriptions to "6.3.1 Status messages"	Refer to sheet 43
p.7-3	Modify "Outer diameter dimension: Depth " in "7.2.2 PJ-2216NXE Unit specifications"	False: 720mm (28.3in.) True: 802mm (31.6in.)
Appendix	Modify "Onsite Adjustment Verification"	Refer to "Onsite Adjustment Verification"
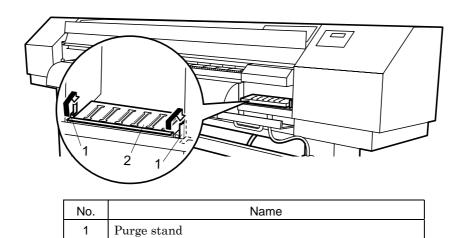
3.4.1 Turning the power ON

p.3-8: Modify the procedures after step 3 as follows:

3. Put the purge plate on the purge stand.

> **NOTE**
>
> ● The purge plate must be placed on the purge stand whenever the power is on, except in the case when head cleaning is performed (☞4.5.4 Head cleaning)
>   If waste fluid comes into contact with the inside of the product, the product may malfunction.
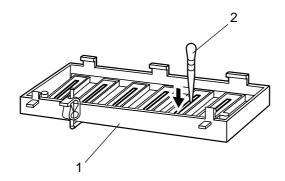> ● When setting the purge plate, make sure not to contact to the print head surface

No.	Name
1	Purge stand
2	Purge plate

4. Close the front cover and the maintenance cover.
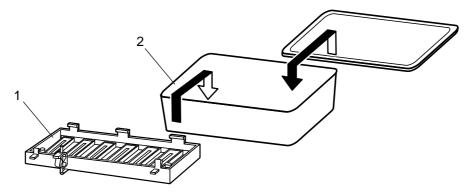
    :   (omitted)

8. After finishing initial setup operations, the product will enter the normal operating condition.

9. Using the attached syringe, soak up the ink collected in the print head cap, then transfer to the container.

No.	Name
1	Print head cap
2	Syringe

10. Keep the print head cap in the accessories box.

No.	Name
1	Print head cap
2	Accessories box

3.4.2 Turning the power OFF

p.3-9 p.3-11 Modify the procedures as follows:

1. Follow "3.8 Test printing", and perform nozzle check printing.

2. Verify if there is any clogging of nozzles, missing dots, or faint printing.
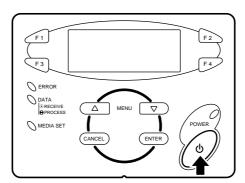
> **NOTE**
>
> ● If printing quality declines, or if missing dots are evident after the nozzle check, the print heads need to be cleaned.
>   See "4.5.4 Head cleaning" to perform head cleaning.
>   If turning the power OFF without head cleaning, the clogged nozzle may not restore.

3. Verify the following regarding the operational condition of the product.

    There is no printing operation being performed.

    The control panel is in a normal status.

4. Push the [POWER] key of the control panel, to turn the product OFF

> **NOTE**
>
> ● The power is ON if the control panel displays the following conditions:
>   The [POWER] key is in the pushed-in condition.
>   The POWER lamp is lit (red)
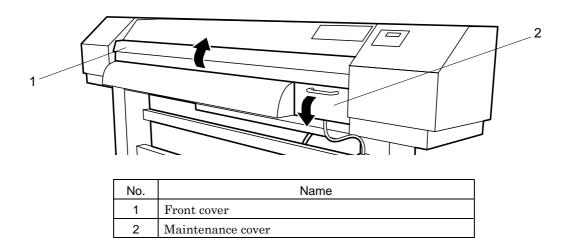>   Press the [POWER] key again to turn the power OFF.

5. The product will perform the power OFF operation.

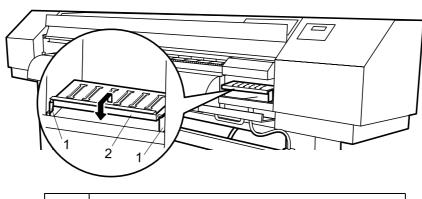   Following message is displayed on the operation panel.

6.   Open the front cover and the maintenance cover.

⚠ **CAUTION**

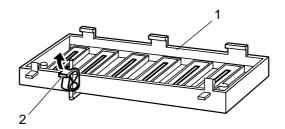● When opening/closing the maintenance cover, be careful not to get fingers caught in the lid.

No.	Name
1	Front cover
2	Maintenance cover

7.   Put the purge plate down from the purge stand.
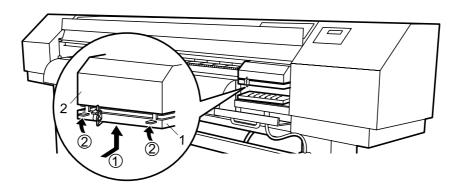
No.	Name
1	Purge stand
2	Purge plate

8.   Open the clip in front of the print head cap.
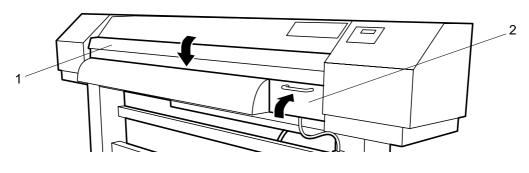
No.	Name
1	Print head cap
2	Clip

9.   Install the print head cap to the print head.
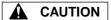

No.	Name
1	Print head cap
2	Print head

10. Close the front cover and maintenance cover.

   Close firmly until the covers are fixed into place.

No.	Name
1	Front cover
2	Maintenance cover

11. After confirming the installation of print head cap, Push the [ENTER] key on the operation panel.

⚠ **CAUTION**

- When turning the power OFF, always install the print head cap.
  Otherwise the nozzle may become clogged.

12. The product supplies the ink to the sub tank.

> During operating, the following message is displayed on the operation panel.

13. The product discharges the ink to the print head cap

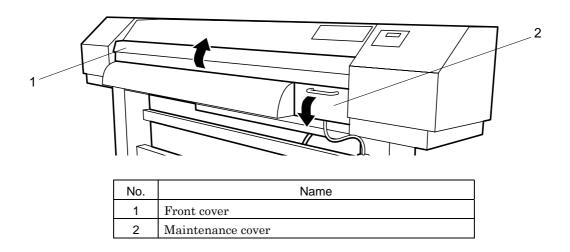> During operating, the following message is displayed on the operation panel.

14. The product will perform the power OFF operation.

> The POWER lamp of the operation panel will turn off.
>
> The product will automatically turn the power OFF.

NOTE

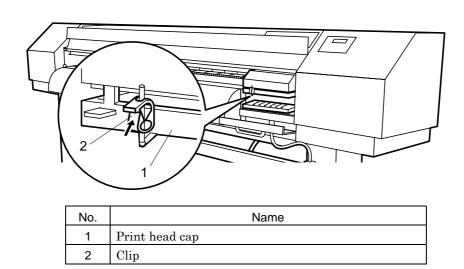- If there are any problems during the power OFF operation, the unit will display a message on the operation panel, and the operation may stop.
  If the operation stops, refer to "6. Troubleshooting", and take the appropriate measures.

15. Open the front cover and the maintenance cover.
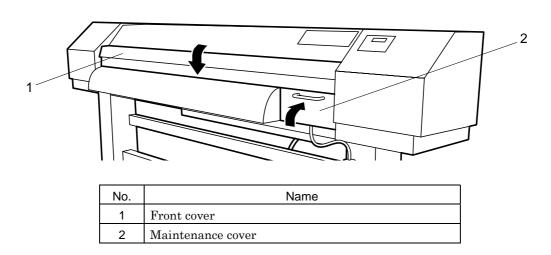
⚠ **CAUTION**

- When opening/closing the maintenance cover, be careful not to get fingers caught in the lid.

No.	Name
1	Front cover
2	Maintenance cover

16. Close the clip in front of the print head cap.

No.	Name
1	Print head cap
2	Clip

17. Close the front cover and maintenance cover.

    Close firmly until the covers are fixed into place.

No.	Name
1	Front cover
2	Maintenance cover

3.5 Refilling the ink – Jet wash fluid

p.3-13   p.3-14: Modify step 2   Step 4 as follows:

2. Pull out the roll media from the feed slot, obtain a uniform tension, and then fix the end of the media to the media tube.

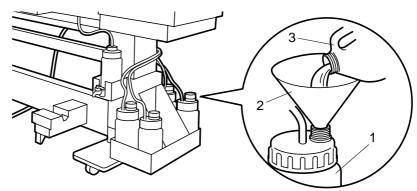3. Refill the ink and jet wash fluid of the product according to the following procedure.

> ⚠ **CAUTION**
>
> ● The refilled ink or jet wash fluid must not exceed the upper limit (about 2 liters (0.5Gal.)) of the main tank. If it exceeds the upper limit, the ink leak out and cause product problems.
>
> ● When filling the main tank with ink, make sure not to make a mistake with the ink color and the ink tube colors. Filling the tank with wrong color ink can make the print head useless.

> **NOTE**
>
> ● The color of the ink to fill in the main tank is labeled on the tank tray according to the following codes:
> K: Black
> C: Cyan
> M: Magenta
> Y: Yellow
> Lc: Light cyan (PJ-2216NXE only)
> Lm: Light magenta (PJ-2216NXE only)
> JW: Jet wash fluid

a)   When refilling the ink:
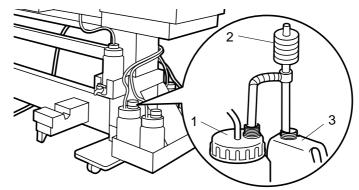
Place the funnel into the main tank, and refill the main tank with the ink from the supply ink bottle.

No.	Name
1	Main tank
2	Funnel
3	Supply ink bottle

b)   When refilling the jet wash fluid:

Using the hand pump, refill the main tank with the jet wash fluid from the container.

No.	Name
1	Main tank
2	Hand pump
3	Container

4.   Remove the funnel or the hand pump, and close the lid securely.

   :

(omitted)

3.6.1 Attaching roll media (PJ-1614NXE)

p.3-19: Modify Step 3 to Step 4 as follows:

3.   Attach the roll media to the scroller according to the following procedure:
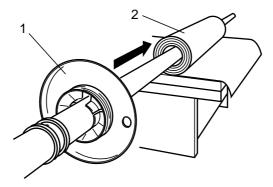
> **NOTE**
> ● Set the roll media on a flat surface, such as on a desk.

a)   When using the roll media such as the printable side with outside:
Insert the fixed flange into the roll media. Note that the media end is on the left side of the media when viewed the flange side.
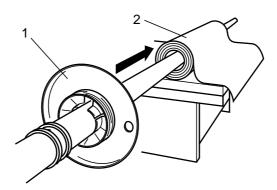
No.	Name
1	Fixed flange
2	Roll media

b)   When using the roll media such as the printable side with inside:
Insert the fixed flange into the roll media. Note that the media end is on the right side of the media when viewed the flange side

> **NOTE**
> ● Problems that occur due to usage of media such as printable side with inside, are not guaranteed.

No.	Name
1	Fixed flange
2	Roll media

4. Insert the flange until the right end meets the media tube of the roll media.

> **NOTE**
> ● When inserting the roll media, do not apply a strong impact against the fixed flange. Doing so could move the fixed flange out of its installation position.

No.	Name
1	Fixed flange
2	Roll media
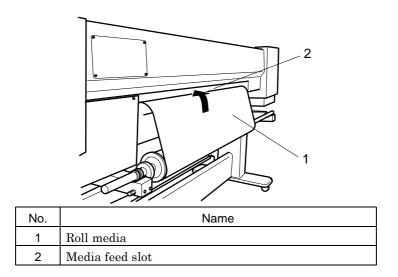
3.6.2 Loading roll media (PJ-1614NXE)

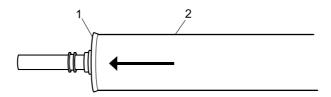p.3-23: Modify after Step 6 as follows:
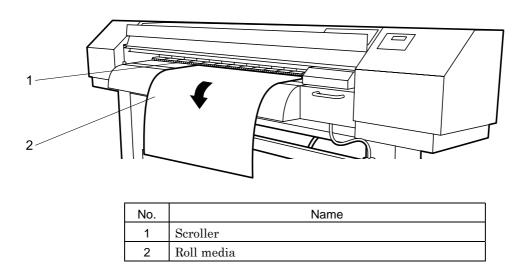
6. Load the roll media into the media feed slot at the rear side of the product.
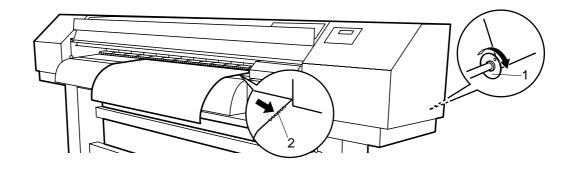
> **NOTE**
>
> ● If there is a part not wounded tightly on the end of the roll media, wind it tightly again, then load it.

No.	Name
1	Roll media
2	Media feed slot

7. Pull the roll media out about 1m from the front media feed slot which is located inside of the front cover.

No.	Name
1	Scroller
2	Roll media

8. Rewind the roll media a little by the scroller while holding the edge of the media, and eliminate any loose or slant. Align the right edge of the media with the media loading position.
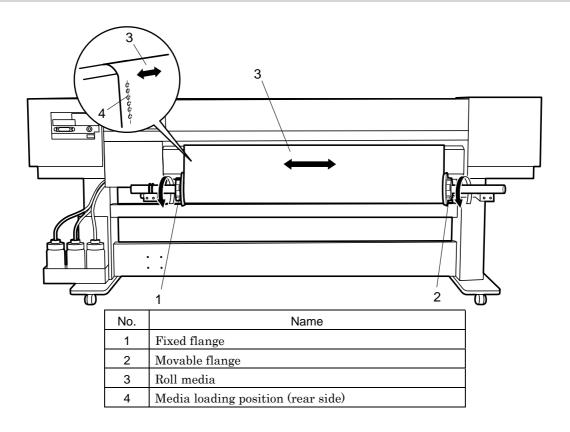
No.	Name
1	Scroller
2	Media loading position

9. If the right edge of roll media is not in line with the media loading position, adjust the scroller position as shown below.

   a) The gap from the media loading position to the right edge of roll media is more than 5mm: Loosen the screws of the movable flange and the fixed flange to move the roll media right and left.

NOTE
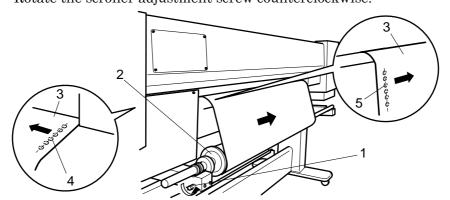
● After adjusting the roll media to the media loading position, tighten the screws of the movable flange and the fixed flange as before.

No.	Name
1	Fixed flange
2	Movable flange
3	Roll media
4	Media loading position (rear side)

b) The gap from the media loading position to the right edge of roll media is less than 5mm:

To move the scroller to the right:
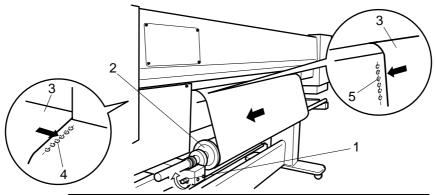
Rotate the scroller adjustment screw counterclockwise.

No.	Name
1	Scroller adjustment screw
2	Scroller
3	Roll media
4	Media loading position (front side)
5	Media loading position (rear side)

To move the scroller to the left:

Rotate the scroller adjustment screw clockwise.

No.	Name
1	Scroller adjustment screw
2	Scroller
3	Roll media
4	Media loading position (front side)
5	Media loading position (rear side)

TIP

● When using the winding unit, follow the instructions under "3.6.5 Setting winding unit", to set the roll media to the winding unit.

10. Press the [F2] key on the control panel to lower the pressurizing roller.

The MEDIA SET lamp will turn off.

(omitted)

3.6.3 Attaching roll media (PJ-2216NXE)
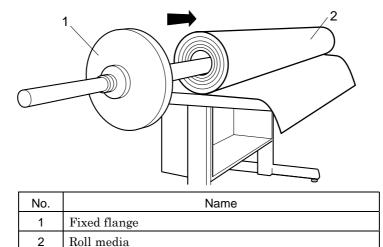
p.3-27: Modify Step 2 as follows:

2. Attach the roll media to the scroller according to the following procedure:

> **NOTE**
>
> ● Set the roll media on a flat surface, such as on a desk.

a) When using the roll media such as the printable side with outside:
    Insert the fixed flange into the roll media. Note that the media end is on the left side
    of the media when viewed the flange side.

No.	Name
1	Fixed flange
2	Roll media
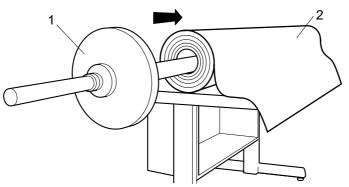
c) When using the roll media such as the printable side with inside:
    Insert the fixed flange into the roll media. Note that the media end is on the right side
    of the media when viewed the flange side

> **NOTE**
>
> ● Problems that occur due to usage of media such as printable side with inside, are not guaranteed.

No.	Name
1	Fixed flange
2	Roll media

3.6.5 Setting winding unit

p.3-34: Add (**NOTE**) in front of the procedure.

> **NOTE**
>
> ● When using the winding unit, always load the media before printing.

p.3-34: Add (**NOTE**) to Step 1
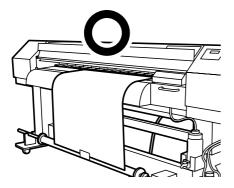
> **NOTE**
>
> ● When using the winding unit, Always use the media tube attached to the product..
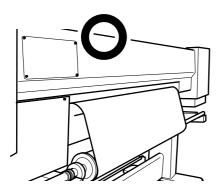
p.3-35: Add (**NOTE**) to Step 3
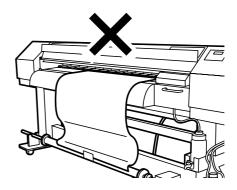
> **NOTE**
>
> ● When setting the roll media to the winding unit,
> Check the front and back of the product and make sure the media is free of wrinkles or slack.
> Install the media on the media tube so that the printing side faces outside. The media cannot be wound if the printable side faces inside.
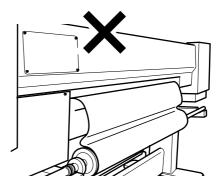
Front section

Rear section

3.6.6 Setting media type

p.3-36   p.3-37: Modify Step 2 as follows.

2. Press the keys below in the control panel to change the settings.

   When changing the type of media: [F2] key

   When going over from media loading: [F3] key

   When changing the setting of winding unit (PJ-2216NXE only): [F4] key

Setup items	Key name	Parameters	Descriptions
Media type	F2	User 1	Set media type for printing.
		User 2	For setup values of printing operation, eight settings
		User 3	of "user 1 8" can be set.
		User 4	☞4.4 Menu setup on the operation panel
		User 5	
		User 6	
		User 7	
		User 8	
Lever Up/Down	F3	Lever Up	Switches between up and down motion of the
		Lever Down	pressurizing lever. Use this when starting over from the media setup.
Send Out/In	F4	Send Out	Set feed unit operation during printing.
		Send In	Send Out: Set when using the roll media such as the printable side is outside
			Send In: Set when using the roll media such as the printable side is inside
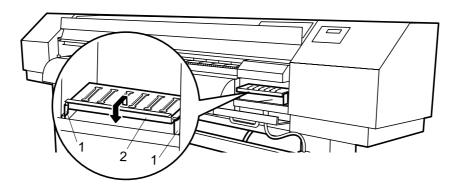
NOTE

● Problems that occur due to usage of media such as printable side with inside, are not guaranteed.

3.7 Head cleaning before printing

p.3-41: Modify the procedures after step 8 as follows:

8. Put the purge plate down from the purge stand.

No.	Name
1	Purge stand
2	Purge plate

9. Using the attached print head wiper, lightly wipe off the ink accumulated on the print head. Wipe from the back of the product toward yourself.
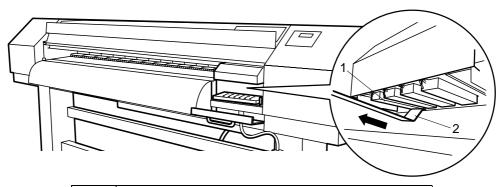
> ⚠ **CAUTION**
>
> ● When cleaning the print head, be careful of the following. Incorrect cleaning may result in clogging of the nozzles.
>
> Do not touch the print head surface with bare hands.
>
> Wipe out ink on the print head wiper every time when ink is adhered to it.

> **NOTE**
>
> ● All print head surfaces must be wiped off even after purging 1 color only.
> Otherwise, ink may drip from the print head at which purging was not performed.
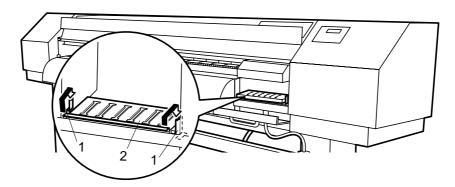
No.	Name
1	Print head
2	Print head wiper

10. Put the purge plate on the purge stand.

No.	Name
1	Purge stand
2	Purge plate

11. Close the front cover and the maintenance cover.

    :
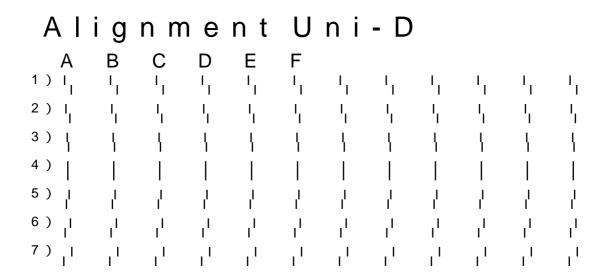
    (omitted)

3.8.3 Alignment
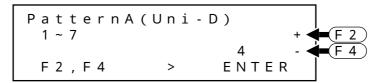
p.3-44   p.3-45: Modify the procedures after step 8 as follows:

To do the Alignment, follow the steps below.

1.   Turn the power ON, and set the media.

2.   Perform accuracy adjustment printing for alignment according to "3.8 Testprinting".

      When performing uni-directional printing: Alignment (for the uni-direction printing)

      When performing bi-directional printing: Alignment (for the bi-direction printing)

3.   From the printing sample, select a number in which the straight line appears with the least blur.

A l i g n m e n t   U n i - D

4.   Press either the [F2] key or [F4] key to select the number for the line you choose in the previous step.

5.   Or Press the [ENTER] key on the operation panel to register the setting value.

4.3.7 Installing media holder plate

If you use any media other than that which is recommended, variations in quality and use conditions could cause the edges of the media to curl, resulting in damage to the media by the print head surface.
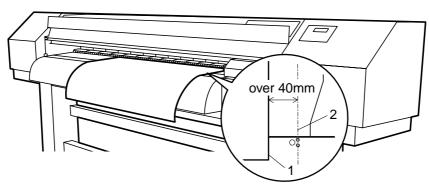
To prevent this, use the media holder plate to reduce the amount of curling in the media.

> **TIP**
> ● It is not necessary to use the media holder plate with recommended media.

Use the following procedure to install the media holder plate.

1. Set the media so that the distance from the edge of the roll media origin side to the media loading position is at least 40mm.

       ☞3.6.2 Loading roll media (PJ-1614NXE)

       ☞3.6.4 Loading roll media (PJ=2216NXE)
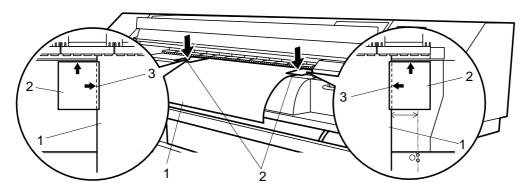
No.	Name
1	Roll media
2	Media loading position

2. Align the edge of the roll media with the alignment line on the media holder plate, and install the media holder plate.

> **NOTE**
> ● When installing the media holder plate, be sure that the magnet in the rear does not stick out from the stainless steel part of the platen.
> If this happens, the media holder plate will come off and interfere with the print head.
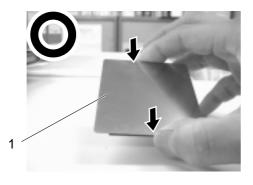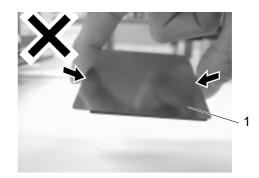
No.	Name
1	Roll media
2	Media holder plate
3	Alignment line

NOTE

- When installing and removing the media holder plate, handle it as shown in the figure below. Mishandling the media holder plate could result in bent metal parts that interfere with the print head.

No.	Name
1	Media holder plate
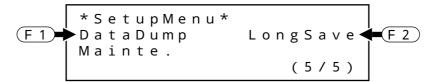
3. After installing the media holder plate, make sure that it does not interfere with the media as it is fed through the printer.

NOTE

- If there is interference with the media as it is fed through the printer even after the media holder plate has been installed, the media holder plate should not be used.
- When removing the media holder plate, slide the plate on the platen for near side.

4.4.1 Setup menu

p.4-11: Modify the descriptions as follows:

Setup items	Parameters	Descriptions
Setup menu(5/5)	Data dump	The dump printing for the online feature check will be performed. ☞4.4.62 Data dump menu
	Long-save	Cleaning for long-term storage is performed. ☞4.4.63 Long-term storage cleaning menu
	Mainte.	Check the parts' life cycle of the product. ☞4.4.66 Maintenance record menu (Refer to sheet 34　35)
Setup menu(1/5　5/5)		[CANCEL] key: Cancel the setup menu, and shift to the normal condition.

4.4.2 Origin setup menu

p.4-12: Modify the descriptions as follows:

```
Current Parameter
```

Setup items	Parameters	Descriptions
Origin setting	L: Media feed value W: Print head movement value (Unit: mm)	Change print head position and media feed amount by operating the following keys. 　[F1] key: Increase setup value L. 　[F2] key: Increase setup value W. 　[F3] key: Decrease setup value L. 　[F4] key: Decrease setup value W. [ENTER] key: Determines the setup values. The print head moves to drawing start point. The following messages are displayed on the operation panel

Setup items	Parameters	Descriptions
Origin setting	Origin Position check Confirm origin position and push ENTER	[ENTER] key: Determines the setup values. The print head returns as before. The operation panel returns to the normal status.

NOTE

- The print head automatically returns after none of keys are pressed for a certain period (5 sec.) while checking the origin position, to avoid drying the print head.

4.4.5 Media type menu

p.4-14: Modify the descriptions as follows:
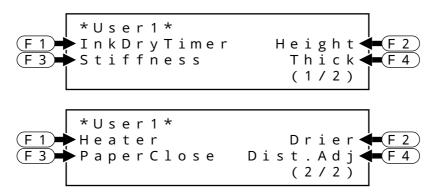
Setup items	Parameters	Descriptions
Type (1/2)	User 1	Set media type for printing.
	User 2	For setup values of printing operation, eight settings
	User 3	of "user 1 8" can be set.
	User 4	☞4.4.6 User media menu (Refer to sheet 30)
Type (2/2)	User 5	
	User 6	
	User 7	
	User 8	
Type (1/2 2/2)		[CANCEL] key: Shift to the previous hierarchy menu.
		☞4.4.4 Media setup menu

4.4.6 User media menu

p.4-15: Modify the descriptions as follows:
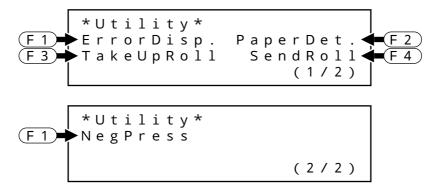
Setup items	Parameters	Descriptions
User media 1　8 (1/2)	Ink Dry Timer	In order to let the ink for the printing dry, the wait time from the time of work end to the next printing is set here. ☞4.4.7 Ink Dry menu
	Height	Set the distance (head height) from print head face to media. ☞4.4.8 Head Height menu
	Stiffness	Makes the setting for the absorbing power of the media to the printing board depending on the hardness of the media. ☞4.4.9 Stiff menu
	Thick	Makes the setting on the width of the media to be used. ☞4.4.10 Thickness menu
User media 1　8 (2/2)	Heater	The platen heater temperature during printing is set. ☞4.4.11 Platen heater menu
	Dryer	The ink dryer temperature during printing is set. ☞4.4.12 Dryer menu
	Paper Close	Sets the winding operation of the winding unit. ☞4.4.64 Winding Unit Menu(Refer to sheet 32)
	Dist.Adj	Perform various settings for media feed compensation. ☞4.4.13 Media feed compensation menu
User media 1　8 (1/2 2/2)		[CANCEL] key: Shift to the previous hierarchy menu. ☞4.4.5 Media type menu (Refer to sheet 29)

4.4.38 Utility menu

p.4-30   p.4-31: Modify the descriptions as follows:

Setup items	Parameters	Descriptions
Utility (1/2)	ErrorDisp.	Set display method to the operation panel when minor error occurred. ☞4.4.39 Error Display menu
	PaperDet.	When media is initialized, set whether to perform detection of width and edge of the media. ☞4.4.40 Media detection menu
	TakeUpRoll	Set winding unit operation for printing. ☞4.4.42 Take-up mechanism menu
	SendRoll	Set the feed unit operation for printing (PJ-2216NXE only). ☞4.4.65 Send Roll menu (Refer to sheet 33)
Utility (2/2)	NegPress	Set operating pressure of negative pressure pump. ☞4.4.43 Negative pressure pump menu
Utility (1/2 2/2)		[CANCEL] key: Shift to the previous hierarchy menu. ☞4.4.1 Setup menu (Refer to sheet 27)

4.4.64 Winding Unit Menu

Sets the winding operation of the winding unit.

Current Parameter ➡
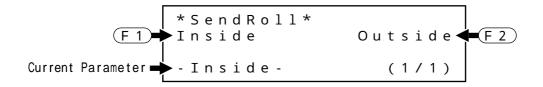
Setup items	Parameters	Descriptions
Paper Close	Off	Winding is not performed.
	<On>	Performs winding.
		[CANCEL] key: Shift to the previous hierarchy menu.
		☞4.4.6 User media menu (Refer to sheet 30)

4.4.65 Send Roll menu

Set the feed unit operation for printing.

Current Parameter ▶
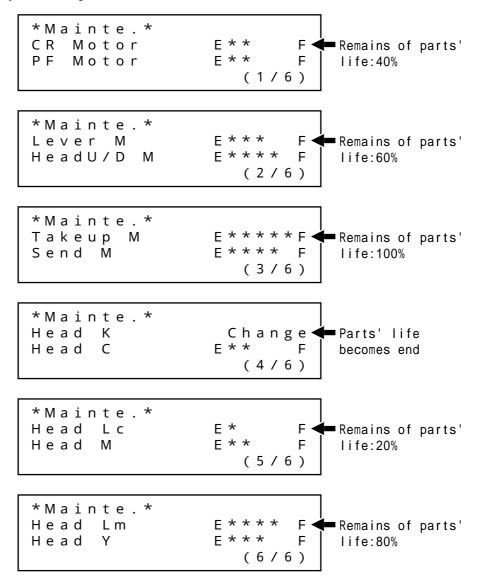
Setup items	Parameters	Descriptions
Send Roll	Inside	Set when using the roll media such as the printable side is inside
	<Outside>	Set when using the roll media such as the printable side is outside
		[CANCEL] key: Shift to the previous hierarchy menu. ☞4.4.38 Utility menu (Refer to sheet 31)

4.4.66 Maintenance record menu
Check the parts' life cycle of the product.

```
                                          ◄━ Remains of parts'
                                             life: 40%


                                          ◄━ Remains of parts'
                                             life: 60%


                                          ◄━ Remains of parts'
                                             life: 100%


                                          ◄━ Parts' life
                                             becomes end


                                          ◄━ Remains of parts'
                                             life: 20%


                                          ◄━ Remains of parts'
                                             life: 80%
```

Setup items	Parameters	Descriptions
Maintenance record (1/6 6/6)	Life cycle: E*****F	Displays the life cycles of the following parts of the product. CR motor PF motor Lever motor Head U/D motor Winding unit motor Media feed motor Print head K Print head C Print head M Print head Y Print head Lc (PJ-2216NXE only) Print head Lm (PJ-2216NXE only) A part's life cycle is shown be the amount of * Mark (max. 5: remain 100%). When a part's life cycle comes to an end, the * mark reduces one (each 20%). If all the * mark is reduced, the life cycle of the part comes to an end. Call the nearest MUTOH local dealer to request exchanging the parts.
		[CANCEL] key: Shift to the previous hierarchy menu ☞ 4.4.1 Setup menu (Refer to sheet 27)

NOTE

- The user will be charged for replacement of a part that has reached its usable life span even during the free warranty period or covered by maintenance contract.
- If parts that have reached their usable life span continue to be used without replacing them, and troubles arise, they will not be guaranteed
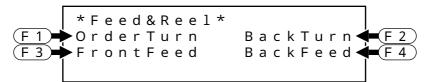
4.5.3 Winding the roll media

p.4-48   p.4-49: Modify Step 2 to Step 3 as follows:

2.   Press the [F3] key of the control panel.

         Moves to the Feed & Reel menu.
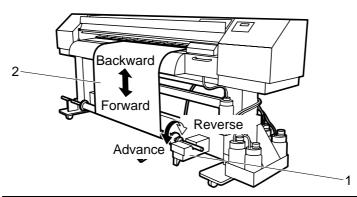
3.   Press the appropriate key, from [F1] key to [F4] key.

         The product will perform the following operations:

Setup items	Key name	Parameters	Descriptions	Remarks
Feed & Reel	F1	OrderTurn	The winding direction rotates in the advance direction. The roll media will be wound up by the winding unit.	This function is available when "ON" is selected in the Take-up mechanism menu ☞4.4.42 Take-up mechanism menu.
	F2	BackTurn	The winding unit rotates in the reverse direction The roll media will be unrolled back out of the winding unit.	
	F3	FrontFeed	Feeds media forward.	
	F4	BackFeed	Feeds media backward.	This function is available when "OFF" is selected in the Take-up mechanism menu ☞4.4.42 Take-up mechanism menu.

NOTE

● The Operating directions of the winding unit and the roll media are shown below.

No.	Name
1	Winding unit
2	Roll media

5.2.3 Replacement of the ink filter

(1) Replacement interval

Replace the ink filter once a year.

(2) Replacement procedure

The ink filters are replaced in a periodic inspection.

> **NOTE**
> ● Call the nearest MUTOH local dealer to replace the parts.

5.2.4 Replacement of the print head and CR motor

The replacement interval and procedure of the print head and the CR motor is described below.

(1) Replacement interval

The print head and CR motor is the consumptions.

Replace the parts periodically according to the average period of expiration shown below.

Name	Average usable life	Use conditions of the product
Print head	6 months	Printing conditions: 360× 360dpi, Bi-D, continuous printing at a 30% of printing rate
CR motor	1 year	1 year must be converted to 8 hours per day, 20 days per month

NOTE
- The user will be charged for replacement of a part that has reached its usable life span even during the free warranty period or covered by maintenance contract.
- If parts that have reached their usable life span continue to be used without replacing them, and troubles arise, they will not be guaranteed

TIP
- The print heads may become clogged and impossible to use even before their period of expiration depending on conditions of use.

(2) Replacement procedure

Replace the parts that have reached their usable life according to the following procedure.
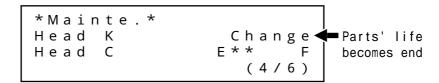
2. When the parts' life becomes end, the following message is displayed on the operation panel.

3. Follow the instructions in "4.4 Manu setup on the operation panel", and bring up the Maintenance record menu on the operation panel.

TIP
- Refer to " 4.4.66 Maintenance record menu (sheet 34 35) for more details.

```



                                                                          ◀━ Parts' life
                                                                             becomes end


```

4. Press the [Menu] key or the [MENU] key to check the name of the parts that have
    reached usable life.

5. Call the nearest MUTOH local dealer to replace the parts.

5.4 Long term storage cleaning

p.5-18　p.5-20: Modify the procedure after step 3 as follows:

3. Follow the instructions in "5.2.1 refilling the ink　jet wash liquid" to refill the jet wash fluid.

4. Follow the instructions in "4.6.2 Disposal of waste fluid" to empty the waste fluid tank.

5. Follow the instructions in "4.4 Menu setup on the operation panel" and bring up the Long-save cleaning menu on the operation panel.

6. Press the [F1] key　[F4] key to select the print head to perform the long-term storage cleaning process.
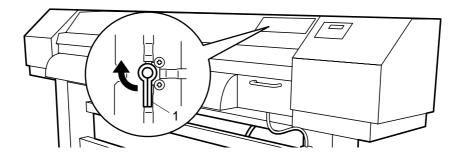
NOTE

- In the Long Save menu, selecting "ALL" is recommended. By selecting "ALL", the long-term storage cleaning treatment is performed for all print heads one by one successively.
- When "No" is selected in the Long Save menu, the menu returns to the previous hierarchy menu without performing the long-term storage cleaning treatment.
- Refer to "4.4.63 Long Save menu" for more details.

7. The product starts the long-term storage cleaning treatment.

It takes about 40　50 minutes to operate the long-term storage cleaning treatment.

The following message is displayed on the operation panel.

NOTE

- In the [****] part of the message, the color of the 3-way valve to be operated will be displayed.

8. Switch the 3-way valve to the jetwash fluid side.

No.	Name
1	3-way valve

9. The product start washing the sub tank.

    The following message is displayed on the operation panel.

10. The product start washing the print head.

    The following message is displayed on the operation panel.

11. The product start injecting the jet wash fluid to the sub tank.

    The following message is displayed on the operation panel.
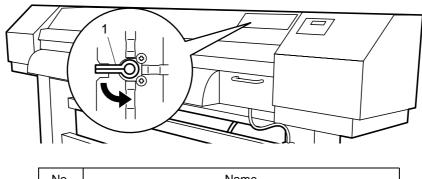
12. After completed the injection of the jet wash fluid, the following message is displayed on the operation panel.

NOTE

● In the [****] part of the message, the color of the 3-way valve to be operated will be displayed.

13. Switch the 3-way valve to the ink side.

No.	Name
1	3-way valve

14. When "ALL" is selected in the Step 6, Step 7   13 is repeated until the long-term storage cleaning treatment is completed for all print heads.

15. When the long-term storage cleaning treatment is completed for all print heads, the operation panel returns to the normal condition.

16. Follow the instructions in "3.4.2 Turning the power OFF" to turn the power OFF.

17. Reattach the valve cover.

18. The long-term storage cleaning treatment is completed.

> **NOTE**
> - IF the power ON after the long-term storage cleaning treatment is completed, the product starts the initial ink filling.

6.3.1 Status messages

(1)   Displays of the operational status (1)

p.6-8: Add the following items.

No.	Display	Solutions	References
8	No Jetwash	Refill the jetwash fluid.	☞5.2.1 Refilling the ink and jet wash liquid
9	Moving Origin Pos.	The Print head is returning to the origin position of the origin setting process.	

(2)   Displays of the operational status (2)

p.6-9: Add the following items.

No.	Display	Solutions	References
10	Jetwash discharge Wait for a while	The jetwash fluid is being discharged the jet wash fluid for the cleaning process of the log-term storage Please wait.	☞5.4 Long term storage cleaning
11	Jetwash injecting Wait for a while	The jetwash fluid is being injected the jet wash fluid for the cleaning process of the log-term storage Please wait.	☞5.4 Long term storage cleaning
12	Ink supplying Wait for a while	The ink is being supplied to eh print head for the power OFF process. Please wait.	☞3.4.2 Turning the power OFF
13	Power Off Please wait	The ink is being discharged into the print head cap for the power OFF process. Please wait.	☞3.4.2 Turning the power OFF
14	*CapCover Set* Put CapCover on and push ENTER	The print head cap is removed. Install the print head cap, and press the [ENTER] key.	☞3.4.2 Turning the power OFF
15	*Origin Pos. Check* Confirm Position and push ENTER	Press [ENTER] key to determine the setup values of the origin setup menu.	☞4.4.2 Origin setup menu

16	***** Warning *****
	There is old parts
	Check Maintenance
		There is the part that becomes end of the life cycle.
		  Check the maintenance record menu.
		  Exchange the parts shown in the maintenance record.
			☞5.2.4 Replacement of the print head and CR motor

17	*Purge End*
	Print -> CANCEL
	Purge -> ENTER
		The Purge process during printing is completed. Press the following keys on the operation panel.
		  When restart printing: [CANCEL]key.
		  When continue purging: [ENTER] key
			☞3.7 Head cleaning before printing

<MEMO>

Onsite adjustment verification

☐ PJ-1614NXE / ☐ PJ-2216NXE

Date _____
Product Number _____

Item	Contents	Check
Package opening	☐ Check the contents of the package	
	☐ Remove the packing materials	
Installation	☐ Placing the main unit horizontally	
	☐ Insure that there is no scratch or scar on the surface of the printer.	
	☐ Insure that Y-bare cable is not out of position when the product is tilted to carry in.	
	☐ Insure that head caps are removed.	
	☐ Insure that the 3-direction cocks are downward. (PJ-1614NXE: 4 locations, PJ-2216NXE: 6 locations)	
	☐ Interface connection (☐Centronics ☐Network)	
	☐ PC ambient (Host name:) (CPU clock frequency: Hz) (Loaded memory capacity: MB) (Available hard disk space: MB)	
	☐ Application software that is mainly used. (☐ Illustrator _____ ☐Photoshop _____ ☐Others _____)	
User environment	☐ Insure that the ventilation facility is proper.	
	☐ Insure that there is no excessive dust.	
	☐ Operational temperature ℃ Operational humidity % (recommended environment: 18℃ - 32℃ / 30% - 70%)	
	☐ Insure that no direct air from the air conditioner or direct sunlight on the printer.	
	☐ Mainly used media ☐Terpolin ☐MF ☐FF ☐Cloth ☐Others	
	☐ Size of the most often used media (width mm× m length)	
	☐ Name of maker of the most often used media ( )	
	☐ Used option (☐HDD ☐Network I/F ☐Scroller)	
Performance check	☐ Insure that all inks are charged to the required level and the lids are all properly closed.	
	☐ Check the initializing performance.	
	☐ Check the initial filling performance.	
	☐ Negative pressure setting _____ kPa (Factory setting: -2.1kPa)	
	☐ Media setting	
	☐ Media initial performance	
	☐ Perge (normal mode) succeed at ___times.	
	☐ Nozzle check	
	☐ Heater performance check (Insure that the platen and the heater of the drier is turned on.	
	☐ Print the parameters. (A person who adjusts must keep these parameters as a record.)	
	☐ Test printing (palette printing)	
	☐ Online printing · Use the same media and data from the time of the inspection before shipping. · Print two printouts. One is collected by a person who adjusts the printer and the other is for the user to keep as a record.	
	☐ Winding unit performance check	
	☐ Feed unit performance check (PJ-2216NXE only)	
Instructions	☐ Panel operation	
	☐ How to store the print head caps when the power is on.	
	☐ Instructions when the power is off.	
	☐ How to use the ink and the jet wash	
	☐ How to load the media and what to do when the media is jammed.	
	☐ Procedures when using the send roll mechanism. (PJ-2216NXE only)	
	☐ Procedures when using the take-up mechanism	
	☐ Head cleaning (purge procedures and important information on cleaning the print head nozzle surface)	
	☐ Important information when other media than MUTOH recommended is used.	
	☐ How to use the platen and the drying heater	
	☐ Explanation of the print head height and each printing mode.	
	☐ Important information when handling the print head	
	☐ Disposal of the waste liquid	
	☐ Procedures of replacing the ink filter	
	☐ Procedures of the long save cleaning (head cleaning)	
	☐ Explanation of optional products	
	☐ Explanation of maintenance (Where to contact etc.)	
Work verification	I certify that the work above is all checked and completed.	
Company name Section or department name Name	Signature	

Cut-off line

Important Notice

This product has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the product is operated in a commercial environment.

This product generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the this manual, may cause harmful interference to radio communications. Operation of this product in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

1. Radio interfere

    Product generates weak radio signals and may interfere with television reception and utilities. If a product does interfere with radio or TV reception, try following:

    • Change the direction of your radio and TV reception antenna or feeder.

    • Change the direction of the product

    • Move either the product or the receiving antenna so there is more distance between them.

    • Be sure the product and the receiving antenna are on separate power lines.

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• MUTOH INDUSTRIES LTD. shall not be liable for any damages or troubles resulting from the use of this equipment or this manual.

Warranty Limitations

1. MUTOH INDUSTRIES LTD. warrants part repair or replacement as a sole measure only if a failure is found in the system or in the materials and workmanship of the product the seller produced. However, if the cause of failure is uncertain, decide the action after due mutual consultation.

2. The warranty shall not apply to any direct or indirect loss, or compensation for the loss due to the product that has been subject to misuse, neglect, or improper alternation.

About This Manual

1. Purpose and target readers

    This manual explains preparations needed before using and procedures for operations for MUTOH INDUSTRIAL LTD. Grand Format Inkjet Printer(PJ-1614NXE,PJ-2216NXE)

    This manual is prepared for the owners and operators of this printer.
    Before using this printer, first understand the contents and directions in this manual.

2. Manual configuration

Section	Contents
1 Safety Instructions	Explains types of warnings, cautions and warnings labeled on the printer for the both operators of the printer and maintenance personnel.
2 Product Overview	Explains the features, part names, and functions of the printer.
3 Basic Installation	Explains the procedures needed before using the printer.
4 Handling the printer	Explains how to handle the printer.
5 Maintenance	Explains daily maintenance of the printer.
6 Troubleshooting	Explains troubles that may occur when using the printer and how to solve them.
7 Appendix	Explains the specifications, optional parts and supplies, installation procedures for optional parts, and user support for this printer.

NOTE

"1 Safety Instructions" through "3 Basic Installation" must be read before using the printer.

Read "4 Handling the printer" through "7 Appendix" as necessary.

---

3. Manual notation

The following symbols are used in this manual for easier understanding of the information.

Symbol	Meaning
⚠ WARNING	Must be followed carefully to avoid death or serious injury
⚠ CAUTION	Must be observed to avoid injury or damage to your equipment
NOTE	Contains important information and useful tips on the operation of your printer
🚫	Indicates "prohibited" operations
❗	Indicates required operations
TIP	Indicates useful tips for operating or understanding the printer
☞	Indicates referrence pages in this manual

GENERAL TABLE OF CONTENTS

4 Handling the printer

5 Maintenance

6 Troubleshooting

7 Appendix

1 SAFETY INSTRUCTIONS

<Memo>

<Memo>

1 Safety Instructions

1.1 Introduction

This chapter explains the meaning of safety terms for personnel who operates this equipment, important safety instructions, and the positions of the warning labels.

⚠ **WARNING**

Be sure to follow all instructions and warnings on this manual when installing the equipment.

1.2 Warnings, Cautions, and Notes

Safety terms in this manual and the contents of warning labels attached to the printer are categorized into the following three types depending on the degree of risk (or the scale of accident).
Read the following explanations carefully, and follow the instructions in this manual.

Safety terms	Details
⚠ **WARNING**	Must be followed carefully to avoid death or serious bodily injury
⚠ **CAUTION**	Must be observed to avoid bodily injury (moderately or lightly) or damage to your equipment
NOTE	Contains important information and useful tips on the operation of your printer

1.3 Important safety instructions

General safety instructions that must be observed to use the equipment safely are explained below.

⚠ **WARNING**

🚫 Do not place the printer in the following areas. Doing so may result in the printer tipping or falling over and causing injury.
- Unstable surfaces
- Angled place
- Areas subject to vibration by other equipment

🚫 Do not stand on or place heavy objects on your printer. Doing so may result in the printer tipping or falling over and causing injury.

🚫 Do not cover the ventilation hole of your printer with cloth, such as a blanket or table cloth. Doing so could obstruct ventilation and cause fire.

🚫 Do not place the printer away from humid and dusty areas. Doing so may result in electrical shock or fire.

🚫 Do not use a damaged power cable. Doing so may result in electrical shock.

🚫 Do not attempt to plug in electrical plugs with wet hands. Doing so may result in electrical shock.

🚫 Do not connect earth cables in the following areas.
- Gas pipes
   Doing so may cause fire or an explosion.
- Earth terminals for telephone line or lightening rod
  Doing so may cause a large flow of voltage if lightening occurs.
- Water pipes or faucets
  If there is a plastic part in the pipe, the earth will not work properly.

🚫 The ink used in the product contains an organic solvent (CYCLOHEXANONE). It is flammable so open flame is prohibited in the area. In a dry environment, static electricity can cause ignition, so before handling the ink, jet wash liquid or waste liquids, touch a metallic object first to remove static electricity from your body. Do not near materials having static, and take appropriate measures against static electricity.

🚫 Do not insert or drop metal or inflammable objects into openings, such as ventilation outlets. Doing so may result in electrical shock and fire.

🚫 Stop using your printer if a liquid is spilled into it. This may cause electrical shock or fire. Turn the printer off as soon as possible, unplug the power cord, contact MUTOH local dealer.

❗ Be sure to use the attached cable. Otherwise, electrical shock or fire may occur.

Be sure to use the specified voltage (AC 100 V- 120 V or AC 220 V - 240 V). Otherwise, electrical shock or fire may occur.

Use electricity directly from a power outlet (AC 100 V- 120 V or AC 220 V - 240 V). Do not put many loads on one electrical output. Otherwise, heat may be generated and cause fire.

Be sure to use an outlet with an earth terminal and use the terminal correctly. Otherwise, electrical shock or fire may occur.

The ink used in this product contains an organic solvent (CYCLOHEXANONE). Make sure to follow the industrial waste disposal laws and ordinances of your local governments.
It is necessary to install a local ventilation unit, push/pull type ventilation unit, or a total ventilation unit to perform adequate ventilation.

If ink or jet wash liquid is swallowed, do not make the person throw up, but immediately call a doctor and a poison management center.
If there is contact in eyes or inhalation, it may cause poisoning. Follow the cautions and procedures labeled on the ink and jet wash bottles, and take action immediately.

The waste fluid from the printer is a waste oil (waste ink) of industrial waste. Proper waste fluid disposal according to industrial waste disposal laws and ordinances of your local governments are required.

⚠ CAUTION

Follow the instructions below when handling the power cable.
• Do not modify the cable
• Do not put heavy objects on the cable
• Do not bend, twist, or pull the cord
• Do not wire the cable near equipment that generates heat

Follow the instructions below when handling the power plug. Otherwise, fire may occur.
• Wipe away dust and any other residue before inserting the plug.
• Ensure that the plug is firmly inserted as far as it will go.

When handling the foot switch, be wary of the following:
• Do not place anything heavy on the foot switch
• Do not bend the cable of the foot switch with force, and do not pull.
• Do not place the foot switch near thermal devices.

When opening/closing the front cover and the maintenance cover, be careful not to get fingers caught in the lid.

The refilled ink or jet wash liquid must not exceed the upper limit (about 2 liters) of the main tank. If it exceeds the upper limit, the ink will leak out and cause printer problems.

When filling the main tank with ink, make sure not to make a mistake with the ink color and the ink tube colors. Filling the tank with wrong color ink can make the print head useless.

During printing, do not touch the media guide. The media guide is hot, and may cause burns if touched.

During the winding operation, make sure to keep hands and fingers clear of moving parts.

When cutting the roll media, be careful of the following. Incorrect handling can result in injury to the hands and fingers from the razor blade.
- When holding the media, do not place fingers over the media cut groove.
- Move the razor blade slowly along the media cut groove.

Do not use thinner, Benzene, alcohol or other active agents. Doing so may result in damage or paint peeling from the casing.

Be careful not to spill water inside the printer. Doing so may result in a short circuit.

Never open the covers fixed with screws. Doing so may result in electrical shock or a malfunction in the printer.

When cleaning the print head, be careful of the following. Incorrect cleaning may result in clogging of the nozzles.
- Do not touch the print head surface with bare hands.
- Wipe out ink on the print head wiper every time when ink is adhered to it.

Do not tilt the printer, stand it against a wall, or turn it upside down. Doing so may cause ink to leak inside the printer. Also, movement after transport is not covered by the warranty.

Have two or more people unpack and transport the printer.

When lifting the printer out of the packing box, be sure to remove the vinyl cover first, then grab the holding sides of the printer. lifting the printer with the vinyl cover on may cause your hands to slip and drop or damage the printer.

Ensure that the plug has been disconnected from the power socket when it is not to be used for a long time.

Earth wires must be connected to wires or terminals that fulfill the conditions below.
- Earth terminals of power socket
- Earth wires with copper morsel that is at least 650 mm under ground

When refilling ink or jet wash fluid, always wear the protective gloves supplied with the unit.

The ink and jet wash liquid are poisonous. If skin contact occurs, wash with soap water and rinse well.

Be sure to close the lid of the main tank tightly. If the lid is not tightly closed or loose, it will cause a defect when purging, loading or unloading the ink.

When performing the following work, always perform work with 2 people.
- Placement of the roll media
- Setting of the roll media
- Setting of the winding unit

When perform the head cleaning:
- Put the gloves supplied with the printer on both hands.
- Only use the print head wiper supplied with the printer. Otherwise the nozzle may become clogged.

Immediately after printing, the media guide and the platen is very hot. Perform work after the media guide and the platen has cooled off.

When changing the ink filter, always perform the following:
- Turn the unit OFF.
- Unplug the electrical power cord
- Remove all cables connected to the unit
If any of these are connected while replacing the filter, the unit may become damaged.

When changing the ink filter, always wear the gloves supplied with the unit on both hands.

When cleaning the waste fluid tray, always wear the protective gloves supplied with the unit.

When cleaning the print head surface, always wear the protective gloves supplied with the unit.

When performing cleaning for long-term storage, always wear the protective gloves supplied with the unit.

Be sure to turn the printer off and unplug the power cord before cleaning.

Keep the printer horizontal during transportation.

Be sure to do the following before attaching expansion memories.
- Turn the printer off
- Unplug the power cord from the socket
- Unplug cables connected to the printer.
Otherwise, damage to the printer or your computer may occur.
- Remove electrostatic charge form your clothes and body by touching the metal parts of the printer.
Electronic components such as the memory may malfunction if exposed to an electrostatic charge.

Before installation of options, always perform the following.
• Turn the power source to the product off.
• Remove the power source plug from the outlet.
• Remove all cables connected to the printer.
Failure to do so could result in damage to the printer or your computer.
• Touch a metallic section of the product, to remove any static electricity in your body. The electronic components can be damaged from static electricity.

When installing options, do not touch the elements on the circuit board. The elements on the boards can be very hot, and can cause burns.

1.4 Warning labels

The handling, attachment locations, and types of warning labels are explained below.
Warning labels are attached to areas where care should be paid. Read and understand the positions and contents thoroughly before performing your work.

1.4.1 Handling the warning labels

Be sure to note the following when handling the labels.
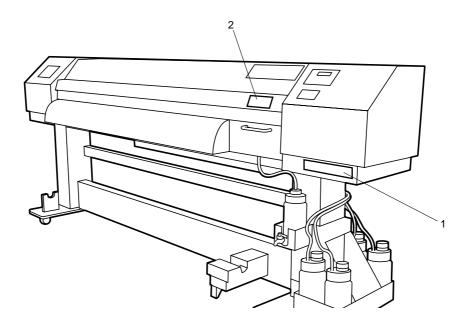
> **NOTE**
>
> - Make sure that all labels can be recognized. If text or illustrations cannot be seen clearly, either clean or replace the label.
>
> - When cleaning labels, use a cloth with water or neutral detergent. Do not use a solvent or gasoline.
>
> - If a warning label is damaged, lost, or cannot be recognized, replace the label.
>   When replacing warning labels, contact MUTOH local dealer.

1.4.2 Locations and types of warning labels
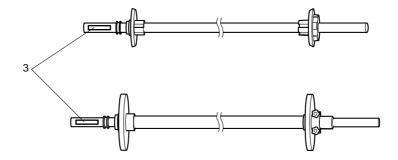
The locations of warning labels are shown below.

(1) Unit

No.	Type
1	⚠ **CAUTION** ◆Always use genuine, exclusive PJ-1614NX/PJ-2216NX ink and jet wash. ◆Always use exclusive PJ-1614NX/PJ-2216NX ink tanks, jet wash tanks and waste liquid tanks. ◆If the user changes and uses the above, there is a risk of unpredictable problems such as ink blockage and deterioration of weatherability. Mutoh gives no warranty with respect to such problems.
2	⚠ **CAUTION VORSICHT ATTENTION** ◆Do not open the front cover or touch the media during printting. This will result in poor image quality. ◆If no printting is to be done for some time, remove the media and set the hold lever in the up position. Otherwise the media may lift up or become wrinkled and you will not be able to obtain good printting results. ◆Während des Druckens nicht die Frontabdeckung öffnen und nicht das Druckmaterial berühren. Das kann das Druckergebnis beeinträchtigen. ◆Wenn längere Zeit nicht gedruckt werden soll, das Druckmaterial herausnehmen und die Haltehebel in die obere Position stellen. Anderenfalls kann sich das Druckmaterial heben oder falten, so daß keine guten Druckergebnisse mehr zu erzielen sind. ◆Ne pas ouvrir le couvercle avant pendant l'impression. Et ne touchez pas le papier pendant l'impression pour éviter que la qualité d'impression ne se dégrade. ◆Si vous ne comptez pas imprimer pendant un certain temps, retirez le papier et mettez le levier en position levée. Sinon, le support risque de se soulever et de se froisser et vous ne pourrez pas obtenir une bonne qualité d'impression.

(2) Scroller

No.	Type
3	⚠ **CAUTION VORSICHT ATTENTION** ◆To prevent the media unrolling, do not slant or stand the media scroller. ◆Bitte setzen Sie die Rollenhalterung nicht abschüseig oder aufrecht, sonst wird die Rollenmedia sich nicht entrollen. ◆Ne mettez pas l'axe rouleau en position verticale ou incliné, pour que le rouleau ne se déroule pas.

2 PRODUCT OVERVIEW

<Memo>

<Memo>

2 Product Overview

2.1 Introduction

This chapter explains the features, part names, and functions of the printer.

2.2 Features

The features of the printer are explained below.

(1) High speed output

Both models use a newly designed high-speed print head, with an improvement of up to 6 times the speed of previous models. Also, the PJ-1614NXE can print up to a maximum width of 1600mm, and the PJ-2216NXE can print up to a maximum of 2159mm in width.

(2) Outstanding weather resistance

With the specially developed solvent-type ink, the output product can last up to 3 years even without lamination. Not only is delivery time reduced, but total cost is reduced as well.

(3) Wide variety of compatible media

Because the height of the head can be adjusted, several types of media including 0.08-1.0 mm Terpolin, cloth, and marking film can be selected.

(4) Vibrant Color Reproduction

To reproduce clear and vibrant colors, the PJ-1614NXE uses 4 colors, and the PJ-2216NXE uses 6 colors. Both models uses 2000cc ink tanks, allowing continuous operation, and raising productivity.
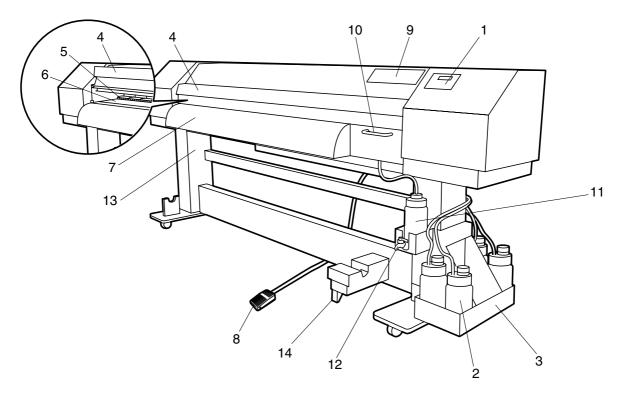
(5) Effective usage of media

A JOG feature is provided to allow setting of the printing position as required. Because printing can be performed on media that has already been printed on, excess space can be used effectively.

2.3 Part names and functions

Part names and functions are explained below.
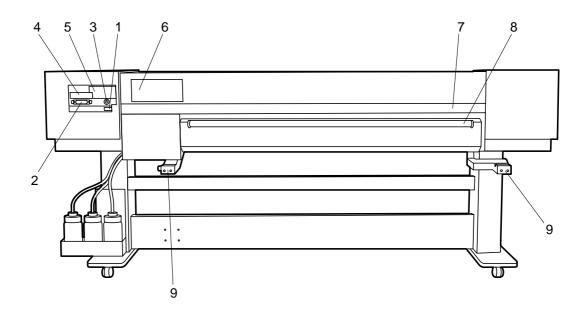
2.3.1 Front

No.	Name	Function
1	Operation panel	This panel is used to set operational conditions, the status of the printer, and other functions.
2	Main tank	Container for holding the ink and the jet wash fluid. The following are attached to the tank tray for each. • PJ-1614NXE: 5 bottles • PJ-2216NXE: 7 bottles
3	Tank tray	Used to attach the main tank to the product.
4	Front cover	This cover keeps the operator safe from the drive parts of the printer while it is operating. Open and/or close the cover only when performing the following operations. • Media setting and replacement • Clearing inside the printer • media jamming
5	Pressurizing roller	This roller is used to press the media from above and keep it flat when printing.
6	Platen	Set inside the front cover. A heater for drying ink is built in. On the surface, there is a cutter groove for paper cutting.
7	Media guide	This is used to feed the media smoothly when setting the media and when printing. There is a ink drying device built in.

No.	Name	Function
8	Foot switch	This switch is used to raise and lower the pressurizing roller.
9	Valve cover	This is a cover to protect the user from the internal components of the unit. It is opened when cleaning the print head or the sub-tank, and is normally closed.
10	Maintenance cover	This is a cover to protect the user from the internal components of the unit. This is opened during the following conditions: • When turning the unit ON or OFF • When cleaning the print head surface. • When cleaning the print head Inside the cover, there is a waste fluid tray to collect waste fluid from the print head.
11	Waste fluid tank	A tank for storing waste fluids discharged from the product.
12	Waste fluid valve	Opened when discharging waste fluid from the waste fluid tank. This is normally closed.
13	Stand	This stand is used to install the printer on a surface flat floor.
14	Winding unit	Winds and collects the printed media.
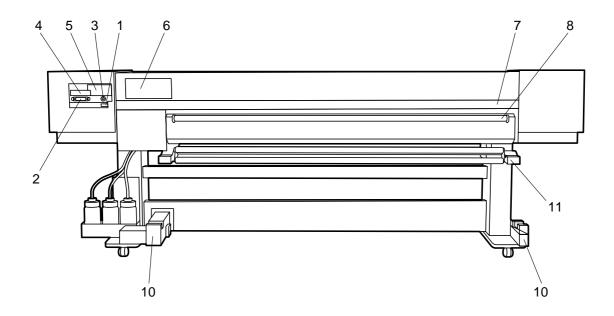
2.3.2 Rear section (PJ-1614NXE)

No.	Name	Function
1	AC inlet	The power cable plug is inserted here.
2	Interface connector	A connector to connect the centronic interface
3	Foot switch connector	A connector to attach the foot switch cable
4	Interface slot	The network interface board (option) attaches here. When not using the network interface, keep the cover closed.

No.	Name	Function
5	Hard disk slot	The hard disk (optional) attaches here. When not using a hard disk, keep the cover closed.
6	Ink filter cover	This cover protects the user from the internal components of the unit. There is an ink filter inside the cover. The cover is opened when changing the ink filter. This is normally closed.
7	Media feed slot	This is the media feed slot for placing the media during the media setting procedure.
8	Damper	Adjusts the tension of the media between the scroller and the media feed slot.
9	Scroller receiver	Loads the scroller when using the roll media.

2.3.3 Rear section (PJ-2216NXE)

No.	Name	Function
1	AC inlet	The power cable plug is inserted here.
2	Interface connector	A connector to connect the centronic interface.
3	Foot switch connector	A connector to attach the foot switch cable.
4	Interface slot	The network interface board (option) attaches here. When not using the network interface, keep the cover closed.
5	Hard disk slot	The expansion hard disk optional) attaches here. When not using an expansion hard disk, keep the cover closed.
6	Ink filter cover	This cover protects the user from the internal components of the unit. There is an ink filter inside the cover. The cover is opened when changing the ink filter. This is normally closed.
7	Media feed slot	This is the media feed slot for placing the media during the media setting procedure.

No.	Name	Function
8	Damper	Adjusts the tension of the media between the scroller and the media feed slot.
10	Feed unit	This is the device which sets the media when using roll media, and feeds it to the printing position.
11	Tension Sensor	Detects the tension of the roll media
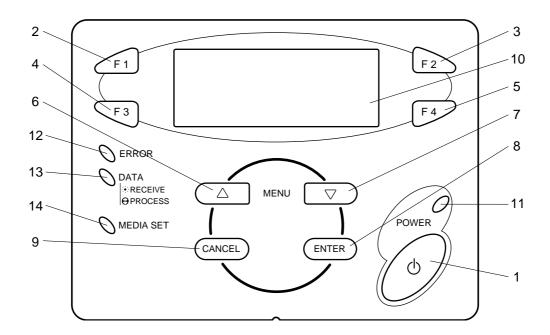
2.3.4 Operation panel

The operation panel is used to set operational conditions, display the status of the printer, and set other functions.

The names and functions of the operation keys and status lamps are explained below.

<u>TIP</u>

- See the sections below for using the operation panel.
  - When setup menus using the operation panel: ☞4.4 Menu setup on the operation panel
  - When setting functions using the operation panel: ☞4.5 Operating from the operation panel

(1) Operation keys

<u>NOTE</u>

- Some keys have multiple functions and names depending on the printer status (normal or setup menu display). See "2.4 Printer status" for more details.

No.	Name	Normal	setup menu display
1	[POWER] key	Turns the printer on and off.	Turns the printer on and off.
2	[F1] key	Executes the function assigned to F1.	Executes the function assigned to F1.
3	[F2] key	Executes the function assigned to F2.	Executes the function assigned to F2.
4	[F3] key	Executes the function assigned to F3.	Executes the function assigned to F3.
5	[F4] key	Executes the function assigned to F4.	Executes the function assigned to F4.
6	[MENU ▲] key	Changes the LCD monitor display to setup menu status.	Changes the menu in reverse order.
7	[MENU ▼] key	Changes the LCD monitor display to setup menu status.	Changes the menu in forward order.
8	[ENTER] key	-	Determines the new parameter value and changes the LCD monitor display to the next menu. Sets the parameter value and changes the LCD monitor display to the next menu.
9	[CANCEL] key	-	Cancels the new parameter value and changes the LCD monitor display to the next menu. Clears the parameter value and changes the LCD monitor display to the next menu.

(2) LCD monitor and status lamps

No.	Name	Color	Status	Function
10	LCD monitor	-	-	This monitor displays the operation status and error messages of the printer.
11	POWER lamp	Red	On	The printer is on.
			Off	The printer is off.
12	ERROR lamp	Red	Flashing	An error has occurred. The contents will be displayed on the LCD monitor.
			Off	Either there is no error in the printer or the power is off.
13	DATA lamp	Green	On	The printer is receiving print data.
			Flashing	The printer is analyzing received data.
			Off	The printer is waiting to receive print data.
14	MEDIA SET lamp	Green	On	• The pressurizing roller is in the release position. • Media is not set.
			Off	• The pressurizing roller is in the secured position. • The media is set.

2.4 Printer status

The status of the printer is explained below.

2.4.1 Normal

Indicates that the printer can draw print data when media is loaded.

You can also make settings concerning printing using the operation panel.

The contents displayed on the LCD monitor of the control panel are as follows.

No.	Position	Description
1	1st line	Displays the current status of the printer. Depending on the status, the contents may be displayed in the 2nd to 4th lines.
2	Left of 2nd line	Displays the function assigned to [F1] key.
3	Right of 2nd line	Displays the function assigned to [F2] key.
4	Left of 3rd line	Displays the function assigned to [F3] key.
5	Right of 3rd line	Displays the function assigned to [F4] key.
6	Left of 4th line	Displays the currently set media type.
7	Right of 4th line	Displays the remaining amount of roll media. (Unit: m) However, the amount is displayed only when either "Roll media 1", "Roll media 2", or "Roll media 3" is selected in the Roll media setup menu. ☞ 4.4 Menu setup on the operation panel

2.4.2 Setup menu display

Indicates that you can make settings concerning printing using the operation panel.

Operations for plotting can be conducted with the operation panel.

The contents displayed on the LCD monitor of the control panel are as follows.

No.	Position	Description
1	1st line	Displays the setup menu name set currently.
2	Left of 2nd line	Displays the function assigned to [F1] key.
3	Right of 2nd line	Displays the function assigned to [F2] key.
4	Left of 3rd line	Displays the function assigned to [F3] key.
5	Right of 3rd line	Displays the function assigned to [F4] key.
6	4th line	• Displays the currently available functions of [F1] key to [F4] key. • Displays the page status if there are multiple pages for the currently displayed setup menu. • Displays the parameter that is currently set.

TIP

- By using the software server RIP, some setups for plotting can be set by the RIP.
  For details, refer to the operation manual of the products.

2.4.3 Changing the printer status

To change the printer status, follow the steps below.

(1) Changing the status from normal to the setup menu display

Press either [MENU ▲] key or [MENU ▼] key on the control panel when the printer is in normal status.
- The display of the control panel changes to the setup menu display.

NOTE
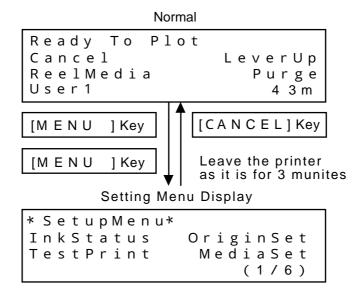
- See "4.4 Menu setup on the operation panel" for details of the setup menu.

(2) Changing the status from the setup menu display to normal

Take one of the following actions when the printer is in the setup menu display to change the operation panel display to normal one.
- Press the [CANCEL] key on the operation panel.
- Leave the printer as it is for 3 minutes when the status is in the setup menu display.

Normal

```
                                            4 3 m
```

[E N U   ] Key   [A N C E L] Key

[E N U   ] Key   Leave the printer
                      as it is for 3 munites

Setting Menu Display

```
                                            1   6
```

NOTE

- See "6.3.1 Status messages" for details of displaying the printer status.

---

3 BASIC INSTALLATION

<Memo>

3 Basic Installation

3.1 Introduction

The procedures needed before using the printer are explained below.

3.2 Connecting the power cable

The connection procedure for the power cable is explained below.

⚠ **WARNING**

- **Make sure that the distributed power cable is used. Use of a different cable may result in electric shock or fire.**

- **Do not use a damaged power cable. Doing so may result in electric shock or fire.**

⚠ **CAUTION**

Be careful of the following when handling the power cable.
- **Do not make any modifications to the power cable.**
- **Do not place anything heavy on the power cable.**
- **Do not bend, twist, or pull the cable.**
- **Do not wire the cable near equipment that generates heat.**
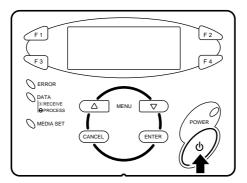
NOTE

If the power cable is damaged, contact one of the following locations.
- The shop where you bought your MUTOH printer
- Nearest MUTOH local dealer

To connect the power cable, follow the steps below.

1. Make sure that the printer is off.

NOTE
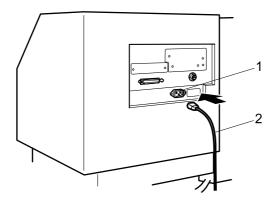
When the control panel is in the following condition, the power is ON.
• [POWER] key is pushed in.
Press the button again to turn the printer off.

2. Plug the power cable to the AC inlet on the back of the printer.

No.	Name
1	AC inlet
2	Power cable

3. Plug the cable to the outlet correctly.

⚠️ **WARNING** ▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬

- **Do not attempt to plug in electrical plugs with wet hands. Doing so may result in electrical shock.**

- **Be sure to use the specified voltage (AC 100V-120V/220V-240V). Otherwise, electrical shock or fire may occur.**

- **Use electricity directly form a power outlet (AC 100V-120V/220V-240V). Do not put many loads on one electrical output. Otherwise, heat may be generated and cause fire.**

- **Be sure to use an outlet with an earth terminal, and use the terminal correctly. Otherwise, electrical shock or fire may occur.**

- **Do not connect earth cables in the following areas.**
  - **Gas pipes**
    Doing so may cause fire or an explosion.
  - **Earth terminals for telephone lines or lightening rods**
    Doing so may cause a large flow of voltage if lightening occurs.
  - **Water pipes or faucets**
    If there is a plastic part in the pipe, the earth will not work correctly.
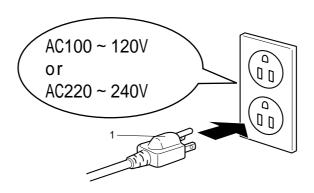
▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬

⚠️ **CAUTION** ▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬

- **Follow the instructions below when handling the power plug. Otherwise, fire may occur.**
  - **Wipe away dust and any other residue before inserting the plug.**
  - **Ensure that the plug is firmly inserted as far as it will go.**

- **Ensure that the plug has been disconnected from the power socket when it is not to be used for a long time.**

- **Earth wires must be connected to wires or terminals that fulfill the conditions below.**
  - **Earth terminals of power socket**
  - **Earth wires with copper morsel that is at least 650 mm under ground**

▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬

NOTE ▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬

- If you cannot use earth terminals or find any of them, contact the shop where you bought your printer.

- Do not unplug the power cable when the printer is on.
  If power cable is unplugged, leave the printer for at least 1 minute before plugging the cable in again.

▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬

No.	Name
1	Power cable

3.3 Connecting the foot switch

The connection procedure for the foot switch is described below.

If the pressure roller needs to be raised or lowered, it is possible to control this motion from the foot switch, instead doing so at the control panel.

⚠ **CAUTION** ▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮

- **When handling the foot switch, be wary of the following:**
  - **Do not place anything heavy on the foot switch**
  - **Do not bend the cable of the foot switch with force, and do not pull.**
  - **Do not place the foot switch near thermal devices.**

▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮

Install the foot switch according to the following procedure.
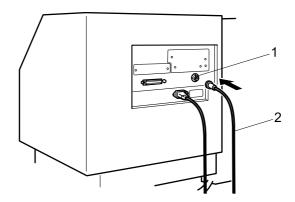
1. Make sure that the power of the unit is OFF.

NOTE ▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮
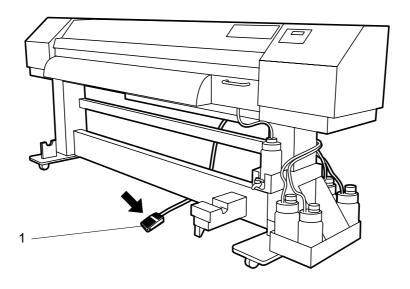
- The power is ON if the control panel displays the following conditions:
  - The [POWER] key is in the pushed in condition
  - The POWER lamp is lit (red).
  Press the [POWER] key again to turn the power OFF.

▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮

2. Connect the foot switch cable connector to the foot switch connector on the rear face of the unit, and fix into place with a screw.

No.	Name
1	Foot switch connector
2	Foot switch cable

3. Place the foot switch on the floor under the stand.

No.	Name
1	Foot switch

3.4 Turning the power ON/OFF

The method to turn the power ON or OFF are described below.
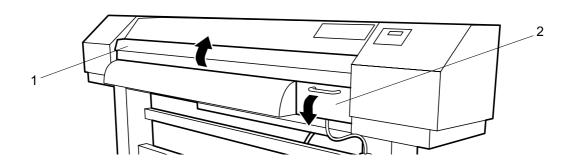
3.4.1 Turning the power ON

Turn the power of the unit ON according to the following procedure.

1. Open the maintenance cover.
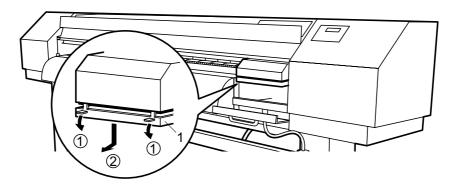
⚠ **CAUTION**

● **When opening/closing the maintenance cover, be careful not to get fingers caught in the lid.**
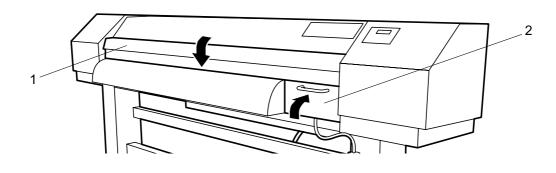
No.	Name
1	Front Cover
2	Maintenance cover

2. Remove the print head cap.
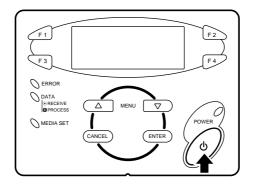
No.	Name
1	Print head cap

3. Close the front cover and the maintenance cover.

    • Close each cover firmly until they are fixed into place.

No.	Name
1	Front Cover
2	Maintenance cover

4. Press the [POWER] key of the control panel, to turn the unit ON.

    • The POWER lamp of the control panel will light (red).

5. The unit will initial startup operations.
    • Following message is displayed on the operation panel.

6. After confirming the removal of the print head cap, push the [ENTER] key on the operation panel.

7. After finishing initial startup operations, the unit will enter the normal operating condition.

> **NOTE** ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━
>
> - If there are any problems during the initial startup operation, the unit will display a message on the control panel, and the operation may stop.
>   If the operation stops, refer to "6. Troubleshooting", and take the appropriate measures.
>
> ━━

3.4.2 Turning the power OFF
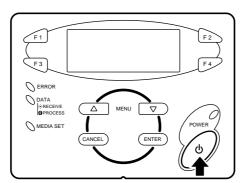
Turn the power of the unit OFF according to the following procedure.

1. Verify the following regarding the operational condition of the unit.
    - There is no printing operation being performed.
    - The Control panel is in a normal status.

2. Push the [POWER] key of the control panel, to turn the unit OFF.
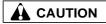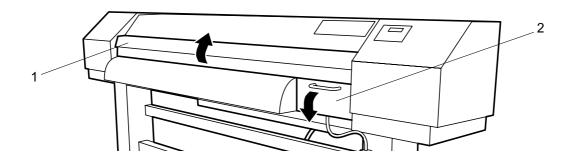
> **NOTE** ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━
>
> - The power is ON if the control panel displays the following conditions:
>   - The [POWER] key is in the pushed in condition
>   - The POWER lamp is lit (red).
>   Press the [POWER] key again to turn the power OFF.
>
> ━━

3. The product will perform the power OFF operation.
    - When the power OFF operation is complete, the POWER lamp of the control panel will turn off.
    - The product will automatically turn the power OFF.

4. Open the front cover and the maintenance cover.
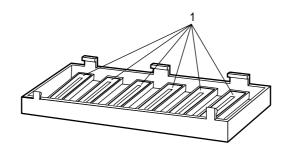
> **⚠ CAUTION** ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━
>
> - **When opening/closing the maintenance cover, be careful not to get fingers caught in the lid.**
>
> ━━
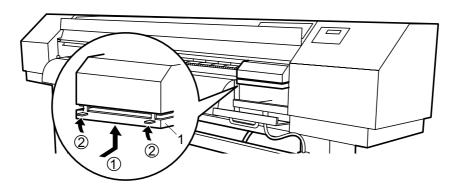
No.	Name
1	Front Cover
2	Maintenance cover

5. Impregnate the jet wash liquid sufficiently into the sponge of the print head cap.
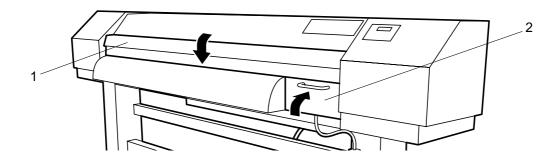
No.	Name
1	Print head cap

6. Install the print head cap to the print head.

No.	Name
1	Print head cap

7. Close the maintenance cover.

    • Close firmly until the cover is fixed into place.

No.	Name
1	Front Cover
2	Maintenance Cover

3.5 Refilling the ink - jet wash fluid

The refilling of the ink and jet wash fluids are described below.

⚠ **WARNING**

- **The ink used in this product contains an organic solvent (CYCLOHEXANONE). Make sure to follow the industrial waste disposal laws and ordinances of your local governments.**
  It is necessary to install a local ventilation unit, push/pull type ventilation unit, or a total ventilation unit to perform adequate ventilation.

- **If ink or jet wash liquid is swallowed, do not make the person throw up, but immediately call a doctor and a poison management center.**
  If there is contact in eyes or inhalation, it may cause poisoning. Follow the cautions and procedures labeled on the ink and jet wash bottles, and take action immediately.

- **The ink used in the product contains an organic solvent (CYCLOHEXANONE). It is flammable so open flame is prohibited in the area. In a dry environment, static electricity can cause ignition, so before handling the ink, jet wash liquid or waste liquids, touch a metallic object first to remove static electricity from your body. Do not near materials having static, and take appropriate measures against static electricity.**

⚠ **CAUTION**

- **When refilling ink or jet wash fluid, always wear the protective gloves supplied with the unit.**

- **The ink and jet wash liquid are poisonous. If skin contact occurs, wash with soap water and rinse well.**

NOTE
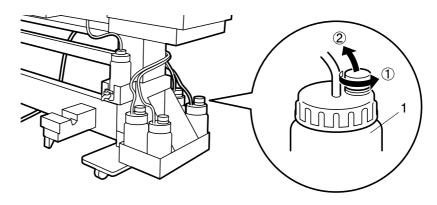
- When filling the ink, use only MUTOH recommended.
  This printer is adjusted under the condition of using only the recommended ink.
  - Using other types of ink may cause faded printing or the ink can not be properly detected.
  - Problems caused by using ink other than the recommended will void the warranty.

- Refer to the following for the ink type and the details.
  ☞7.4 Options/Supply list

> TIP
>
> • During the factory shipping inspection, in order to perform verification of printing operations, ink is passed through the ink routing of the unit once, so there will be some coloration of the ink passages, waste fluid tubes and filters.

Refill the ink and jet wash fluid of the unit according to the following procedure:

1. Open the lid of the main tank.

No.	Name
1	Main tank

2. Hold the ink supply bottleupside-down 2 or 3 time, without letting the ink bubble in the bottle.

3. Place the funnel into the main tank, and refill the main tank with the ink or jet wash liquid from the supply ink bottle.
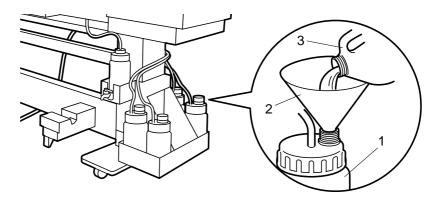
⚠ CAUTION

● **The refilled ink or jet wash liquid must not exceed the upper limit (about 2 liters) of the main tank. If it exceeds the upper limit, the ink will leak out and cause printer problems.**

● **When filling the main tank with ink, make sure not to make a mistake with the ink color and the ink tube colors. Filling the tank with wrong color ink can make the print head useless.**

> **NOTE**

The color of the ink to fill in the main tank is labeled on the tank tray according to the following codes:
- K: Black
- C: Cyan
- M: Magenta
- Y: Yellow
- Lc: Light Cyan (PJ-2216NXE only)
- Lm: Light Magenta (PJ-2216NXE only)
- JW: Jet wash fluid

No.	Name
1	Main tank
2	Funnel
3	Supply ink bottle
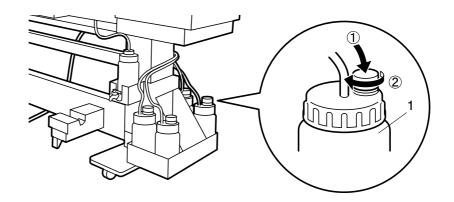
4. Remove the funnel from the main tank, and close the lid securely.

> **⚠ CAUTION**

- **Be sure to close the lid of the main tank tightly. If the lid is not tightly closed or loose, it will cause a defect when purging, loading or unloading the ink.**
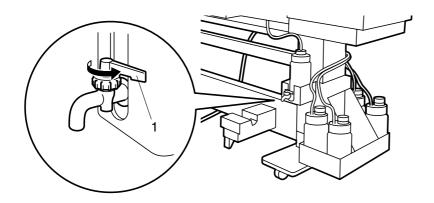
> **NOTE**

- When filling the main tank with ink, always change the funnel for every color.
- After using the funnels, clean the ink off with jet wash fluid well before storing.

No.	Name
1	Main tank

5. After filling 1 tank of ink, fill the next color main tank.

6. After filling all main tanks with ink, make sure that the discharge valve is closed securely.

No.	Name
1	Waste fluid valve
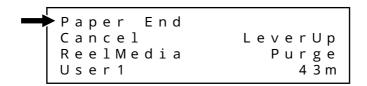
7. Turn the power of the unit ON.

8. The printer starts initial filling.
   - Following message is displayed on the operation panel.

NOTE ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━

During ink replenishment, note the following.
• Do not turn the printer off.
• Do not unplug the power cable.
• Do not open the front cover or the maintenance cover.

━━━

9. When the initial filling finishes, following message up is displayed on the operation panel.

→ ┌─────────────────────────────┐
  │   │
  │   │
  │   │
  └─────────────────────────────┘

NOTE ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━

printing the first time after ink replenishment may lead to the following phenomena.
• Printed line grazes
• White lines
any of the above occurs, perform head cleaning 2 or 3 times before printing by following the procedures of "3.7 Head cleaning before printing", then check the printing result.
If your image is still different from what you expected, leave the printer for at least 1 hour, execute head cleaning, print your image, then check it.
If you still want to make improvements, contact MUTOH local dealer.

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3.6   Media handling

The following describes the procedures for installing and setting roll media, setting types of media, and using the take-up mechanism.
The procedures required for media installation is shown in the following flow diagram.
Refer to the following items according to the model to be used before performing the operations.

(1) For PJ-1614NXE

1. Install the roll media to the scroller. ☞3.6.1 Attaching roll media (PJ-1614NXE)

↓

2. Set the roll media to the product. ☞3.6.2 Loading roll media (PJ-1614NXE)

↓

3. When the take-up mechanism is used, set the take-up mechanism to the roll media. ☞3.6.5 Setting winding unit

↓

4. Set the media type. ☞3.6.6 Setting media type

(2) For PJ-2216NXE

1. Install the roll media to the scroller. ☞3.6.3 Attaching roll media (PJ-2216NXE)

↓

2. Set the roll media to the product. ☞3.6.4 Loading roll media (PJ-2216NXE)

↓

3. When the take-up mechanism is used, set the roll medial to the take-up mechanism. ☞3.6.5 Setting winding unit

↓

4. Set the media type. ☞3.6.6 Setting media type

> ⚠ **CAUTION**
>
> - **When performing the following work, always perform work with 2 people.**
>   - **Placement of the roll media**
>   - **Setting of the roll media**
>   - **Setting of the winding unit**

3.6.1 Attaching roll media (PJ-1614NXE)

The procedure for attaching roll media to the printer is explained below.

To attach roll media, use the scroller that comes with your printer.
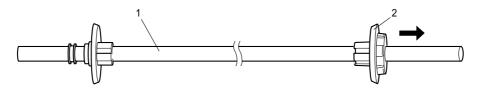
> **NOTE**
>
> - The following roll media can be attached to the scroller supplied with this unit.
>   - Diameter of the cardboard core : 2 inches (External diameter :150mm or less, weight: 50kg or less) or Diameter of the cardboard core: 3 inches (External diameter: 150mm or less, weight: 50kg or less)
>   - The printable side of the roll media must be on the outside.
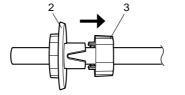
To attach roll media, follow the steps below.

1. Loosen the screw for the movable flange, and remove from the scroller.

No.	Name
1	Scroller
2	Movable flange

2. When using a roll media with a media tube diameter of 2 inches, remove the movable flange and the fixed flange adapter.
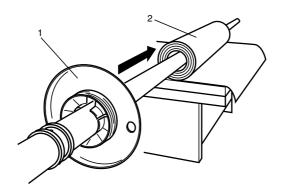
No.	Name
1	Movable flange

No.	Name
2	fixed flange
3	Adapter

3. Insert the fixed flange into the roll media. Note that the media end is on the left side of the media when viewed from the flange side.

NOTE

- Set the roll media on a flat surface, such as on a desk.

No.	Name
1	Fixed flange
2	Roll media

4. Insert the flange until the right end meets the media tube of the roll media.
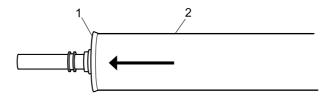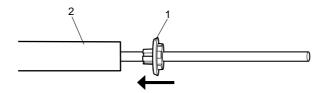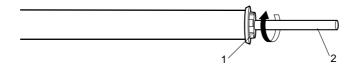
No.	Name
1	Fixed flange
2	Roll media

5. Attach the movable flange to the other end of the media to fix the media firmly.

No.	Name
1	Movable flange
2	Roll media

6. Tighten the screw of the movable flange to fix the roll media to the scroller.
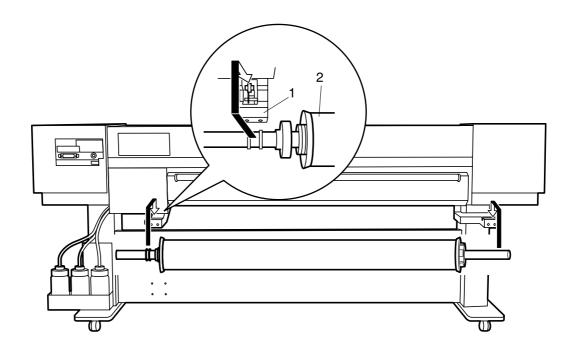
No.	Name
1	Movable flange
2	Scroller

7. Hold the scroller so that the fixed flange side faces the left when facing the back of the product, then install both ends of the scroller to the scroller receiver.

NOTE

- Set the scroller onto the printer correctly by referring to the figure below.
  If the scroller direction is wrong, the printer cannot feed the media correctly.

No.	Name
1	Scroller receiver
2	Scroller

3.6.2 Loading roll media (PJ-1614NXE)

The procedure for loading roll media is explained below.

To load roll media, follow the steps below.

1. Turn the printer on.

2. The printer starts the initializing operation.

    • The following message is displayed on the operation panel.

___NOTE___

- In the following conditions, follow "4.4 Menu setup on the operation panel" and set individual settings.
  - When using the winding unit: Set the winding unit setting to "ON".
  - ☞4.4.42 Take-up mechanism menu
  - When not performing media detection during media initialization: Set media detection to "OFF".
  - ☞4.4.40 Media detection menu
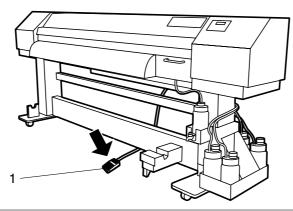
3. Verify that the MEDIA SET lamp on the control panel is unlit.

4. Press [F2] key to raise the pressurizing roller.

   - The MEDIA SET lamp will light (green).
   - Following message is displayed on the operation panel.

___NOTE___

- When raising or lowering the pressurizing roller, you can use the foot switch instead of the control panel.

No.	Name
1	Foot switch
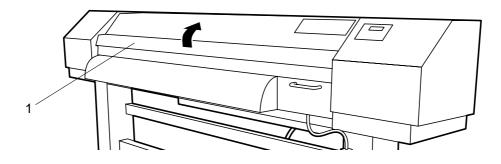
5. Open the front cover.

   - "Lever up" is displayed on the LCD monitor.

⚠ CAUTION

● **Be careful not to pinch your fingers when opening and closing the front cover.**
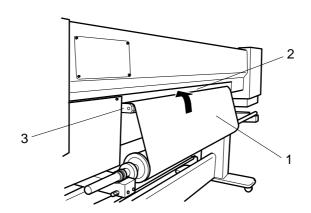
No.	Name
1	Front cover

6. Load the roll media from the above the damper into the media feed slot at the backside of the printer.
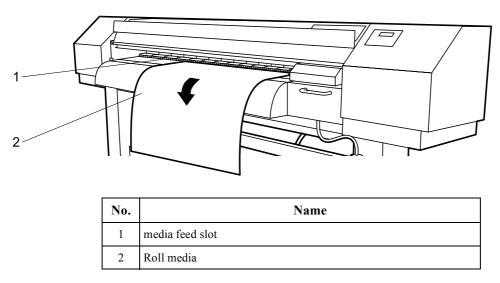
NOTE

● If there is a part not wounded tightly on the end of the roll media, wind it tightly again, then load it.
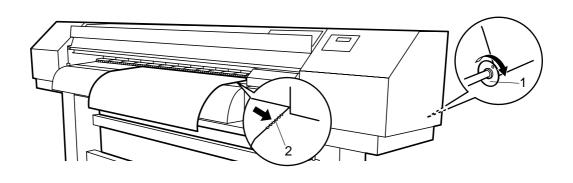
No.	Name
1	Roll media
2	media feed slot
3	Damper

7. Pull the roll media out about 1m from the front media feed slot which is located inside of the front cover.

No.	Name
1	media feed slot
2	Roll media

8. Rewind the roll media a little by the scroller while holding the edge of the media, and eliminate any loose or slant. Align the right edge of the media with the media loading position.

No.	Name
1	Scroller
2	Media loading position

NOTE
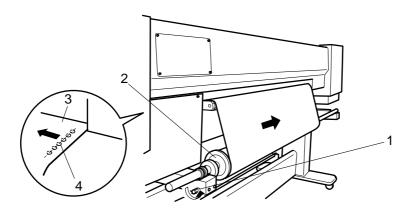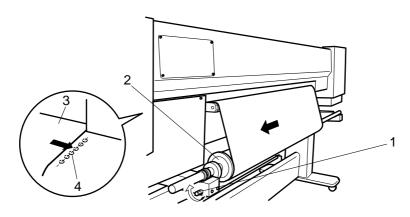
• If the right edge of roll media is not in line with the media loading position, adjust the scroller position as shown below.

• To move the scroller to the right
Rotate the scroller adjustment screw counterclockwise.

No.	Name
1	Scroller adjustment screw
2	Scroller
3	Roll media
4	Media loading position

• To move the scroller to the left

Rotate the scroller adjustment screw clockwise.

No.	Name
1	Scroller adjustment screw
2	Scroller
3	Roll media
4	Media loading position

```
TIP
```

When using the winding unit, follow the instructions under "3.6.5 Setting winding unit", to set the roll media to the winding unit.

9. Press the [F2] key on the control panel to lower the pressurizing roller.
    • The MEDIA SET lamp will turn off.

10. Close the front cover.

⚠ **CAUTION**

● **Be careful not to pinch your fingers when opening and closing the front cover.**

NOTE

● If you load a new tube of roll media, the media end may not be straight. If so, cut the end of the roll media. See "4.6.1 Roll media cutting procedure" to cut the roll media.

No.	Name
1	Front cover

11. The media initial menu is displayed on the control panel.

TIP

● When changing the media type, follow "3.6.6 Setting media type" and set the type of media.

3.6.3 Attaching roll media (PJ-2216NXE)

The procedure for attaching roll media to the printer is explained below.

To attach roll media, use the scroller that comes with your printer.
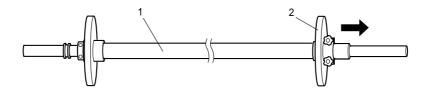
> **NOTE**
>
> • The following roll media can be attached to the scroller supplied with this unit.
>   • media tube diameter 3 inches (external diameter 250mm or less, weight 100kg or less.)
>   • The printable side of the roll media must be on the outside.

To attach roll media, follow the steps below.

1. Loosen the screw for the movable flange, and remove from the scroller.
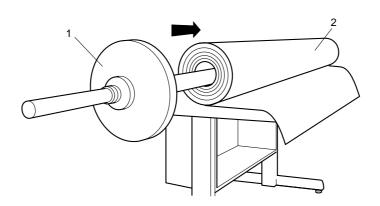
No.	Name
1	Scroller
2	Movable flange

2. Insert the fixed flange into the roll media. Note that the media end is on the left side of the media when viewed from the flange side.

> **NOTE**
>
> • Set the roll media on a flat surface, such as on a desk.
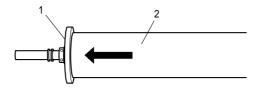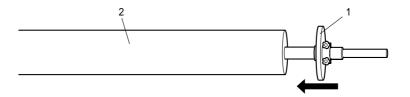
No.	Name
1	Fixed flange
2	Roll media

3. Insert the flange until the right end meets the media tube of the roll media.
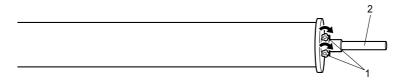
No.	Name
1	Fixed flange
2	Roll media

4. Attach the movable flange to the other end of the media to fix the media firmly.

No.	Name
1	Movable flange
2	Roll media

5. Tighten the screw of the movable flange to fix the roll media to the scroller.
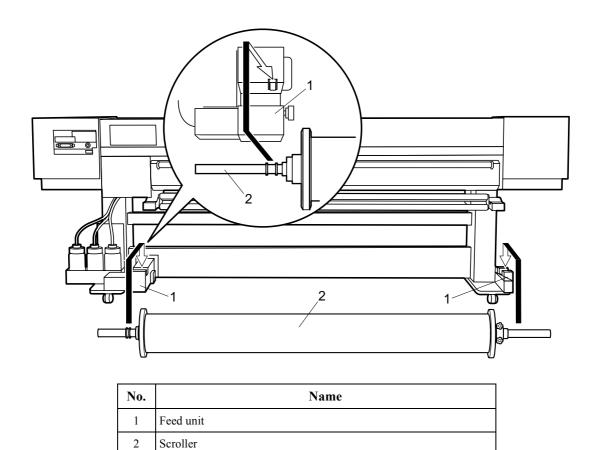
No.	Name
1	Movable flange
2	Scroller

6. Hold the scroller with the fixed flange coming to the left side of the product (viewed from its back), and attach the both ends of the scroller to the feed unit of the product.

> **NOTE**
>
> - Set the scroller onto the printer correctly by referring to the figure below.
>   If the scroller direction is wrong, the printer cannot feed the media correctly.

No.	Name
1	Feed unit
2	Scroller

3.6.4 Loading roll media (PJ-2216NXE)

The procedure for loading roll media is explained below.

To load roll media, follow the steps below.

1. Turn the printer on.
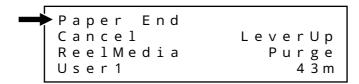
2. The printer starts the initializing operation.

    • "media end" is displayed on the LCD.
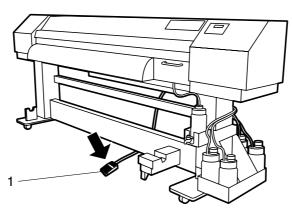
> **NOTE** ━━
>
> • In the following conditions, follow "4.4 Menu setup on the operation panel" and set individual settings.
>   • When using the winding unit: Set the winding unit setting to "ON"
>   • When not performing media detection during media initialization: Set media detection to "OFF"
>
> ━━

3.   Verify that the MEDIA SET lamp of the control panel is unlit.

4.   Press [F2] key to raise the pressurizing roller.

   • The MEDIA SET lamp will light (green).
   • The following message is displayed on the operation panel.

> **NOTE** ━━
>
> • When raising or lowering the pressurizing roller, you can use the foot switch instead of the control panel.

No.	Name
1	Foot switch

━━

5.   Open the front cover.

> ⚠ **CAUTION** ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━
>
> ● **Be careful not to pinch your fingers when opening and closing the front cover.**
>
> ━━
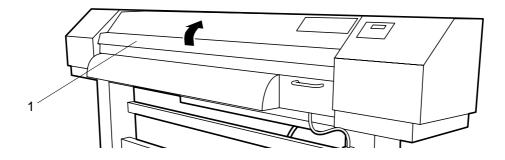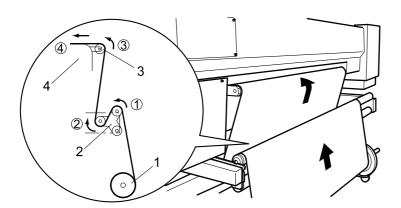
No.	Name
1	Front cover

6. After passing the roll media through the tension sensor on the back of the unit, place in the media feed slot from the top of the damper.
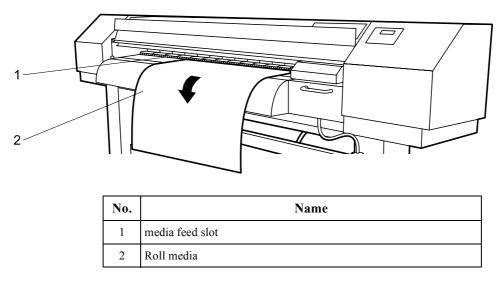
NOTE

- If there is a part not wounded tightly on the end of the roll media, wind it tightly again, then load it.
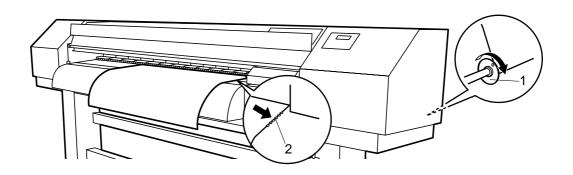
No.	Name
1	Roll media
2	Tension sensor
3	Damper
4	media feed slot

7. Pull the roll media out about 1m from the front media feed slot which is located inside of the front cover.

No.	Name
1	media feed slot
2	Roll media

8. Rewind the roll media a little by the scroller while holding the edge of the media, and eliminate any loose or slant. Align the right edge of the media with the media loading position.

No.	Name
1	Scroller
2	Media loading position

NOTE
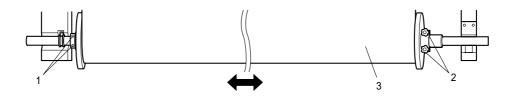
*   If the right edge of roll media is not in line with the media loading position, adjust the roll media as shown below.

Loosen the screws for the scroller listed below, and move the roll media to the left or to the right.
*   Fixed flange screws (hex bolt, 5mm: x 2)
*   Movable flange screws (x 2)
After adjusting the position of the scroller, tighten the bolts back in their original positions.

No.	Name
1	Fixed flange screw (x 2)
2	Movable flange screws (x 2)
3	Roll media

> **TIP**
>
> When using a winding unit, follow "3.6.5 Setting winding unit" and set the roll media to the winding unit.

9. Press the [F2] key on the control panel to lower the pressurizing roller.
    • The MEDIA SET lamp will turn off.

10. Close the front cover.

> **⚠ CAUTION**
>
> • **Be careful not to pinch your fingers when opening and closing the front cover.**
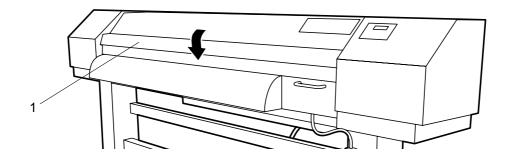
> **NOTE**
>
> • If you load a new tube of roll media, the media end may not be straight. If so, cut the end of the roll media. See "4.6.1 Roll media cutting procedure" to cut the roll media.

> **TIP**
>
> • When changing media types, follow "3.6.6 Setting media type" to set the type of media.

No.	Name
1	Front cover

- The media initial menu is displayed on the control panel.

> **TIP**

- When changing the media type, follow "3.6.6 Setting media type" .
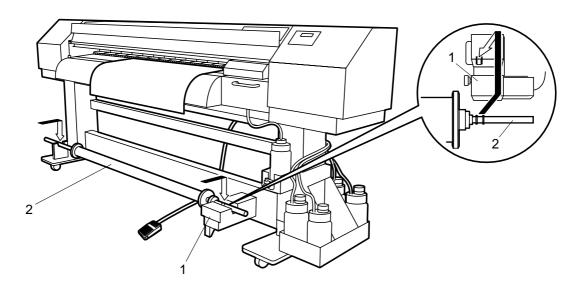
3.6.5 Setting winding unit

The setup for the winding unit is described below
When using the winding unit, set up the winding unit according to the following procedure.

1. Attach the media tube to the scroller for the winding unit
    - ☞3.6.1 Attaching roll media (PJ-1614NXE)
    - ☞3.6.3 Attaching roll media (PJ-2216NXE)

2. hold the scroller so that the fixed flange is on the right, and attach both ends of the scroller to the winding unit.

> **NOTE**
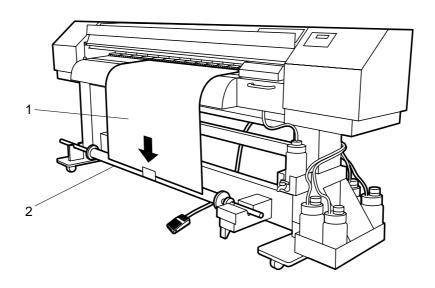
- When attaching the scroller to the product, refer to the following diagram and attach properly.
  If the direction of the attachment is wrong, the media will not be wound correctly.
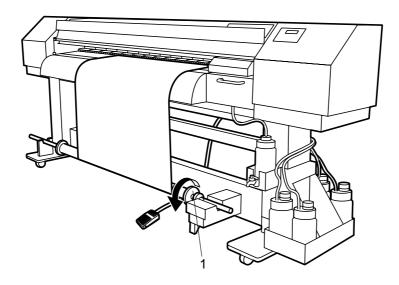
No.	Name
1	Winding unit
2	Scroller

3. Pull out the roll media from the feed slot, and fix into place with tape so that the leading edge is parallel with the media tube.

No.	Name
1	Roll media
2	media tube

4. Rotate the scroller by hand, and wind the roll media to the media tube about one and a half turns.

No.	Name
1	1. Scroller

5. Set the roll media according to the following procedures:
   - ☞3.6.2 Loading roll media (PJ-1614NXE)
   - ☞3.6.4 Loading roll media (PJ-2216NXE)

3.6.6 Setting media type

The procedure for setting media type is explained below.
To set the media type, follow the steps below.

1. Turn the printer on and load the media.

   - After setting the media, go to the media initialization Menu.

TIP

See the following sections to load media.
☞3.6.2 Loading roll media (PJ-1614NXE)
☞3.6.4 Loading roll media (PJ-2216NXE)

2. Press the keys below in the control panel to change the settings.
   - When changing the type of media: [F2] key
   - When going over from media loading :[F3] key

Setup items	Key name	Parameters	Descriptions
Media type	F2	Marking	Set the recommended media type to be used. When the media other than those recommended is used, use the setting User 1-8.
		Cloth	
		Back lit	
		Turpolin	
		User 1	(TIP) ▬▬▬▬
		User 2	• When the recommended media is used, the quality related settings are made according to the media type.
		User 3	
		User 4	• When user media is used, the quality related settings are made arbitrarily.
		User 5	☞4.4 Menu setup on the operation panel
		User 6	
		User 7	
		User 8	
Lever Up/Down	F3	Lever Up	Switches between up and down motion of the pressurizing lever. Use this when starting over from the media setup.
		Lever Down	

3. Press the [ENTER] key on the operation panel.

   • The media type is set.
   • The printer starts the media initialization.

(NOTE) ▬▬▬▬▬▬▬▬▬▬▬▬

In the media initial menu, if the following is performed, the unit will move on to the media initial operation without setting the media type.
• Pressing the [CANCEL] key on the operation panel
• Leaving the printer for 10 seconds without doing anything

4. When the media initial operation finishes, the printer moves to normal status.

   • The setting media loading procedure is completed.

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3.7 Head cleaning before printing

Before printing, perform purge and head cleaning to clean the print head surface and the nozzle. Follow the steps below for the head cleaning.

> ⚠ **CAUTION**
>
> - **When perform the head cleaning:**
>   - **Put the gloves supplied with the printer on both hands.**
>   - **Only use the print head wiper supplied with the printer. Otherwise the nozzle may become clogged.**
>
> - **The ink and jet wash liquid are poisonous. If skin contact occurs, wash with soap water and rinse well.**

1. Turn the unit power ON.

2. Verify that the unit is in a normal status.

3. Press the [F4] key of the control panel.

   - Go on to the Purge menu.

4. Press the following keys on the control panel to change the settings.
   - When changing the ink color: [F1] key
   - When changing the purge mode: [F2] key

> **TIP**
>
> - The factory default settings (initial values) are set as follows. Normally, there is no need to change the settings.
>   - Ink Color: All
>   - Purge mode: Normal
>
> - For details on the settings, refer to "4.5.4 Head cleaning".

5. Press the [ENTER] key of the control panel.

• The settings are confirmed.
• The unit will start the purge process.

TIP
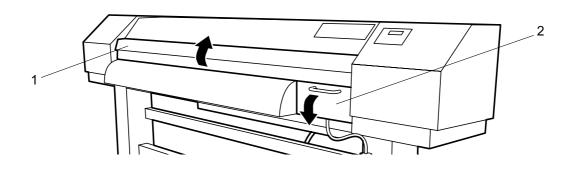
• In the purge menu, if the following operation is performed, the unit will return to normal status without performing the purge process.
  • When the [CANCEL] key of the control panel is pressed.

6. When purge is completed for all print heads, the control panel returns to the normal status.

7. Open the front cover and the maintenance cover.

⚠ CAUTION

● **When opening and closing the front cover and maintenance cover, be careful not to get fingers caught on the lid.**
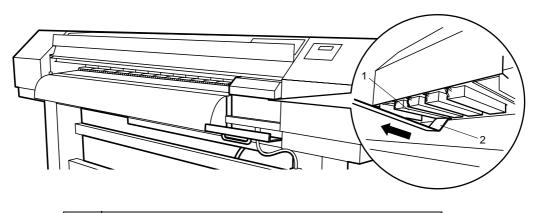
No.	Name
1	Front cover
2	Maintenance cover

8. Using the attached print head wiper, lightly wipe off the ink accumulated on the print head. Wipe from the back of the printer toward yourself.

⚠ CAUTION

- **When cleaning the print head, be careful of the following. Incorrect cleaning may result in clogging of the nozzles.**
  - **Do not touch the print head surface with bare hands.**
  - **Wipe out ink on the print head wiper every time when ink is adhered to it.**
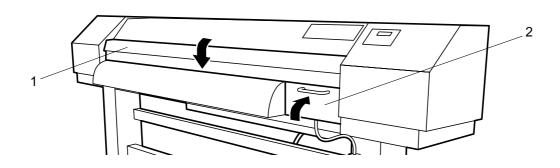
No.	Name
1	Print head
2	print head wiper

9. Close the front cover and the maintenance cover.
   - Close each cover firmly until they are fixed into place.

No.	Name
1	Front cover
2	Maintenance cover

10. Cleaning operation is ended.
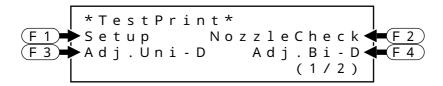
3.8 Testprinting

Follow the steps below to do a testprinting and confirm that your printer operates correctly.

1. Turn the power of the unit ON, and set the media.

2. Make sure that your printer is in normal status.

3. Press either the [MENU ▲] key or [MENU ▼] key on the control panel.

    • The setup menu is diplayed.

4. Press [F2] key on the control panel.

    • "TestPrint: SetupPrint" is displayed on the LCD.

5. Select an item among the following and press the appropriate key, from [F1] key to [F4] key.

Setup items	Key name	Parameters	Descriptions
Test Print (1/2)	F1	Setup	Perform Setup Llist. ☞3.8.1 Setup List
	F2	Nozzle check	Perform Nozzle check. ☞3.8.2 NozzleCheck
	F3	Adj.Uni-D	Perform Alignment fot the uni-direction printing. ☞3.8.3 Alignment
	F4	Adj.Bi-D	Perform Alignment fot the bi-direction printing. ☞3.8.3 Alignment
Test Print (2/2)	F1	Palete	Perform Color Palette. ☞3.8.4 Color Palette
	F2	Mainte.	Perform Maintenance record. ☞3.8.5 Maintenance record

6. Print the information on the selected item.

7. After printing, the printer returns to the normal status.

```
                                   3-43




```

3.8.1 Setup List

Use this function to check the current status of the printer.

NOTE

Please attach the Setup List data on this page.

TIP

For printing, refer to the following.
☞3.8 Testprinting

Setup List

FileMng	
WriteMode	=OFF

Information			
SerialNO. =DE8J000001		TEMP	1:35 3:35 5:37
Model	=PJ-2216NX	!Error!	2:35 4:35 6:40
PROM	=V 1.00	0 None	3 None
NVRAM	=V 1.00	1 None	4 None
Opt.Memory	=256MB	2 None	5 None

Media Setup		Dist.Adj	
Media	=User 1	DataX	=1000.00
InkDryTimer	=0sec	RealX	=1000.00
HeadHight	= high	Stiffness	= Normal
Thick	=114um	PlatenHeater	=OFF
		Drier	=OFF

Print Mode			
Print Mode1		Print Mode2	
Condition	=360× 360	Condition	=360× 360
InterLace	=2pass	InterLace	=OFF
Direction	=UniDir	Direction	=UniDir
RepeatPrn		RepeatPrn	
Count	=1	Count	=1
Int.Time	=0.0sec	Int.Time	=0.0sec
Print Mode3		Print Mode4	
Condition	=360× 360	Condition	=360× 360
InterLace	=OFF	InterLace	=OFF
Direction	=UniDir	Direction	=UniDir
RepeatPrn		RepeatPrn	
Count	=1	Count	=1
Int.Time	=0.0sec	Int.Time	=0.0sec

Command Setup			
ImageReso.	=360dpi	PositionOffsetY	=0mm
Online Timew	=30sec		

Layout Setup	
Joint	=OFF
JointMargin	=0mm

Centronics	
Mode	=Bi Centro

RollSet
Disable

Function	
CMY- BLACK	=Yes
Mirror	=OFF
Scale	=100.0

Utility			
ErrorDisplay	=OFF	TakeUpRoll	=ON
PaperDet	=Yes	NegPress	=-2.0kPa

3.8.2 NozzleCheck

Use this function to check if there is any clogging of nozzles, missing dots, or faint printing.
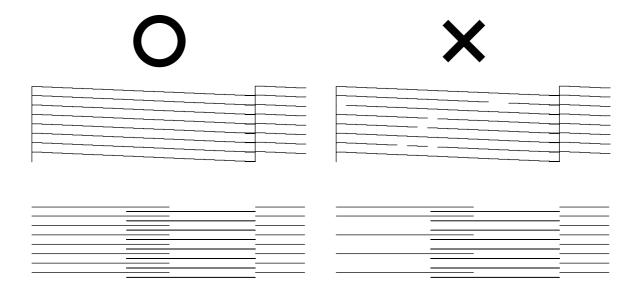
NOTE

If printing quality declines, or if missing dots are evident after the NozzleCheck, the print heads need to be cleaned.
See "4.5.4 Head cleaning" to perform head cleaning.
After finishing the head cleaning, perform the NozzleCheck again.

TIP

For printing, refer to the following.

3.8.3 Alignment

Use this function to adjust the print quality for best results.
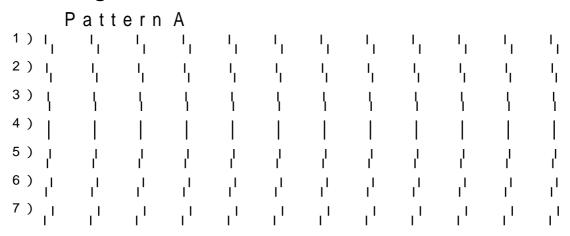
> **NOTE**
>
> The print quality of your printer is pre-adjusted when it is shipped.
> When the installation environment of the printer or media type have been changed and print quality declines, use this function.
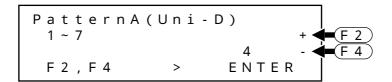
To do the Alignment, follow the steps below.

1. Turn the power of the unit ON, and set the media.

2. Perform accuracy adjustment printing for alignment according to "3.8 Testprinting".
   • When performing uni-directional printing: Alignment (for the uni-direction printing)
   • When performing bi-directional printing: Alignment (for the uni-direction printing and the bi-direction printing)

3. From the printing sample "Pattern A", select a number in which the straight line appears with the least blur.

A l i g n m e n t   D

P a t t e r n A

```
1   |,      |,      |,      |,      |,      |,      |,      |,      |,      |,      |,      |,
     |,      |,      |,      |,      |,      |,      |,      |,      |,      |,      |,      |,

2   |,      |,      |,      |,      |,      |,      |,      |,      |,      |,      |,      |,
     |,      |,      |,      |,      |,      |,      |,      |,      |,      |,      |,      |,

3   |       |       |       |       |       |       |       |       |       |       |
     \       \       \       \       \       \       \       \       \       \       \

4   |       |       |       |       |       |       |       |       |       |       |

5   ,|      ,|      ,|      ,|      ,|      ,|      ,|      ,|      ,|      ,|      ,|      ,|
     |       |       |       |       |       |       |       |       |       |       |       |

6   ,|      ,|      ,|      ,|      ,|      ,|      ,|      ,|      ,|      ,|      ,|      ,|
     |,      |,      |,      |,      |,      |,      |,      |,      |,      |,      |,      |,

7   ,|      ,|      ,|      ,|      ,|      ,|      ,|      ,|      ,|      ,|      ,|      ,|
     |,      |,      |,      |,      |,      |,      |,      |,      |,      |,      |,      |,
```

4. Press either the [F2] key or [F4] key to select the number for the line you choose in the previous step.

5. Or Press the Enter key on the operation panel to register the setting value of the "Pattern A".

6. Repeat the steps from 3 to 5 to register all settings followed the "Pattern B".
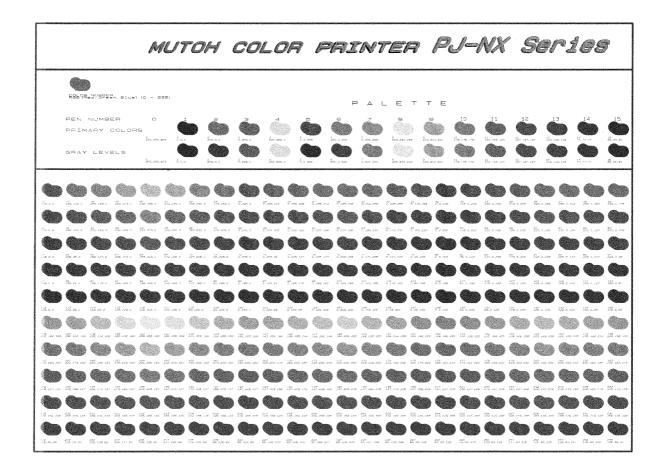
3.8.4 Color Palette

This is used when comparing the pen color setting on the computer used and the drawn color of the product.

> **TIP**
>
> For printing, refer to the following.
> ☞3.8 Testprinting

3.8.5 Maintenance record

Use this function to check the life cycles of the parts of the printer.

> TIP

- A part's life cycle is shown by the amount of the ★ mark.

  When a part's life cycle comes to an end, the ★ mark reduces.

- For printing, refer to the following.

  ☞3.8 Testprinting

```
=========Meintenance Record=========
        Version             :  1.00
        Page Count          :  1785
        CR Motor Life       :  E★★★★★F
        PF Motor Life       :  E★★★★★F
        Black Head Life     :  E★★★★★F
        Cyan Head Life      :  E★★★★★F
        L.Cyan Head Life    :  E★★★★★F
        Magenta Head Life   :  E★★★★★F
        L.Magenta Head Life:  E★★★★★F
        Yellow Head Life    :  E★★★★★F
```

3.9   Connecting the printer to your PC

How to connect the printer to your PC.

3.9.1 System requirements

The computer system parameters required for the operation of this product is as shown below.

System OS	Windows2000 Professional
CPU	PentiumIII 600 MHz or higher
Memory (RAM)	256 MB or more
Hard disk space	6 GB or more

NOTE

- The memory requirements may vary depending on the type of applications you are using and the complexity of the document you want to print.

- MUTOH recommends you use as large a hard disk and bulk memory as possible.

3.9.2 Selecting cables

A centronics interface is equipped with this printer for connecting with a computer.
To connect the printer to your computer, you need to purchase a centronics interface cable. Select a cable that fits your system environment depending on your computer or printing purpose.

TIP
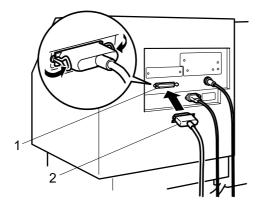
- See "3.9.3 Connecting the interface cable" for the connection procedure.

- See "7.3 Interface Specifications" for the connection procedure.

3.9.3 Connecting the interface cable

The procedure for connecting the interface cable is explained below.
To connect the printer to your computer, follow the steps below.

1. Turn the printer and your computer off.

2. Plug the cable connector of the interface cable into the interface connector on the back of the printer.
    Squeeze the wire clips together until they lock into place.

No.	Name
1	Centronics interface connector
2	Interface cable

3. Plug the other end of the cable into the computer's port.

TIP

- See your computer's manual for the procedure for connecting to the computer.

- You can use your printer on a network using a network interface board (optional).
  When connecting the board, see "7.5.2 Installing network interface board" for details.

- For types and details of the network interface board (optional), refer to the following.
  ☞7.4 Options/Supply list

4 HANDLING THE PRINTER

4 Handling the printer

4.1 Introduction

This chapter explains how to handle the printer.

4.2 Drawing flow

The following flow chart illustrates the procedure for drawing with the printer.
Refer to each item as necessary.

```
┌──────────────────────────────────────────────────────┐
│ 1. Make the drawing data                               │
│ Make the printing data using an application software.  │
└──────────────────────────────────────────────────────┘
                            ↓
┌──────────────────────────────────────────────────────┐
│ 2. Turn on the printer and load media into the printer.│
│ ☞      3.6 Media handling                              │
│ ☞      4.3 Using media                                 │
└──────────────────────────────────────────────────────┘
                            ↓
┌──────────────────────────────────────────────────────┐
│ 3. Perform head cleaning before printing.              │
│ ☞      3.7 Head cleaning before printing               │
└──────────────────────────────────────────────────────┘
                            ↓
┌──────────────────────────────────────────────────────┐
│ 4. Make the preference setting for drawing with the    │
│    printer.                                            │
│ ☞      4.4 Menu setup on the operation panel           │
└──────────────────────────────────────────────────────┘
                            ↓
┌──────────────────────────────────────────────────────┐
│ 5. Start drawing.                                      │
│ ☞      4.5 Operating from the operation panel          │
└──────────────────────────────────────────────────────┘
                            ↓
┌──────────────────────────────────────────────────────┐
│ 6. Perform after-printing operations.                  │
│ ☞      4.6 Operations after printing                   │
└──────────────────────────────────────────────────────┘
```

⚠ CAUTION

During printing, do not touch the media guide. The media guide is hot, and may cause burns if touched.

NOTE

Do not open the front cover during printing. Doing so may stop drawing with the printer.
Though the printer resumes printing after you close the front cover, the quality of printing cannot be guaranteed.

4.3 Using media

This section describes details on media available for the printer.

4.3.1 Media type

The type and qualities of media greatly much effect the results of drawing. Understand the description below fully and use the appropriate media for your purpose.
The following are the recommended media for the printer. Select the appropriate media for your purpose.

> **NOTE**
>
> - For more information about the recommended media, contact MUTOH local dealer.
>
> - Problems that occur due to usage of media other than those recommended are not guaranteed.

> **TIP**
>
> - When using the recommended media, the setting values for the printing quality is set for each media type.
>   For the details of the settings, see "7.4 Options/Supply list".
>
> - When printing on media other than those specified, information regarding proper settings for the media type and settings for the product should be found on the instructions for the media, or contact the retailer of the media.

4.3.2 Cautions on handling media

When you handle media, pay attention to the following.

NOTE ══

- Use the recommended medias in an appropriate environment.
  Following are the temperature and humidity ranges appropriate for printing.
  - Temperature:18°C- 32°C
  - Humidity:30%- 70% No condensation is allowed.

- Do not use any of the following media.
  - Media with crease, scar, tear, twist or media which tends to curl.
  - Welded media

- The size of the recommended medias can change at a fixed ratio according to the temperature changes of the working environment. Before using the media, place the media in the working environment for at least 30 minutes, to have it match the temperature of the working area.
  printing before media adjusts to the printing environment may cause media jams due to slippage or creases. This also adversely effects the quality of printing.

- Media has a printable side and a non-printable side. If you print on a not printable side, blurring or slight touching may occur.

- Do not touch the printable side of media. Moisture or oil from hands effects the printing quality.

- Do not leave the printer for a long time with media loaded. The media may curl resulting in misalignment of media, media jams, or decreased printing quality. In particular, avoid this in winter, dry seasons, or during final printing.

- Do not lose the box or rapping bag for storing media.

══

4.3.3 Precaution on storing media

When storing media, pay attention to the following.
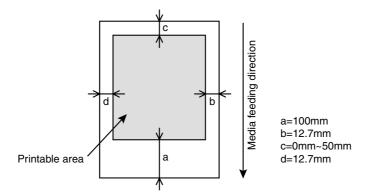
NOTE ══

- Store media away from high temperature, high humidity, or direct sunlight.

- Unused roll media must be removed from the scroller, rewound tightly, and stored in the original wrapping bag and the box.

- Do not wet media.

══
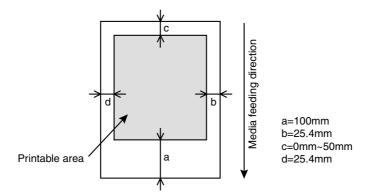
4.3.4 The printing area

printing areas of each media with the printer are as shown below.

(1) PJ-1614NXE

a=100mm
b=12.7mm
c=0mm~50mm
d=12.7mm

(2) PJ-2216NXE

a=100mm
b=25.4mm
c=0mm~50mm
d=25.4mm

TIP

- Printing margin C of the media feed direction is preset at the factory to 0mm as the initial value. To change the printing margin C, reset it by following the steps in "4.4Menu setup on the operation panel".
  - Set the continuous printing item to "ON".
  ☞4.4.29Joint printing menu
  - Change the value in the continuous margin item.
  ☞4.4.30Joint margin menu

- Printing margin A of the media feed direction becomes 0 mm automatically for following cases.
  - When the continuous printing is set as "ON".
  ☞4.4.29Joint printing menu

4.3.5 Criteria for the media feed

The criteria for the media feed that can be used for this product are as follows.
 Before using media, confirm the following evaluation items.

> **NOTE**
>
> - Among the following items, if following problems occurred, those may not be warranted even if the maintenance contract is concluded. (Repair may require expense.)
>   - No.1-3, 6-8, 13, 14

> **TIP**
>
> - For details of the setup menu, refer to "4.4Menu setup on the operation panel".

No.	Evaluation Item	Evaluation Method	Criteria
1	Paper float, cockle, friction	1. Set "High" for the print head height menu of the operation panel. 2. Confirm the following operation. • Perform no printing, media feed only. • Perform 4m printing by 200% print.	No Paper float, cockle, friction. Or media should not make friction with the print head nozzle.
2	Antistatic	1. Set following items for the Printing mode menu of the operation panel. • Printing quality:360dpi×180dpi • Printing direction 2. Perform a printing of one-roll (min. 20m). No error printing, error feed, and machine-stop.	No error printing, error feed, and machine-stop.
3	Slant	1. Set following items for the Printing mode menu of the operation panel. • Printing quality:360dpi×360dpi • Printing directionÅFUni-direction 2. Perform printing.	Within 30m±0.1% with left/right edge of the media as the baseline
4	Detect the end of roll media.	After Media setting, confirm the end of roll media.	No error for detection of the end of roll media.
5	Media sensor	After Media setting, detect media.	No error for media detection sensor.
6	Weight, Diameter, Number of rolling, Width	Confirm media visually.	• PJ-1614NXE O.D.: Max. 150mm, Weight: Max. 50kg • PJ-2216NXE O.D.: 250mmMax.,Weight: 100kgMax.
7	Thickness	Confirm media visually.	Within 0.08mm-1.0mm
8	Rolling start of cardboard core	Confirm media visually.	Media breakaway without cardboard core lift. No remains of adhesives on media.
9	Condition of both edges of roll media	Confirm media visually.	Align the edges with the edges of the cardboard core. Tolerance: +2.0mm,-1.5mm
10	Roll direction	Confirm media visually.	Printable side should be outboard. (Printable side with inboard should not be allowed)

No.	Evaluation Item	Evaluation Method	Criteria
11	Damage, wrinkle, stain, foreign materials on media	Confirm media visually.	No damage, wrinkle, stain, and foreign materials on media.
12	Cardboard core I.D.	Confirm media visually.	• Full insertion of scroller to media flange. • No slipping
13	Curl	Confirm media visually.	• No float by the curl when sticking media to the media guide. • No friction with the print head nozzle during printing.
14	Scuffing	Confirm media visually.	No scuffing on media surface.

4.3.6 Media feed compensation

Depending on thickness of media, media feed amount will change. Printing results may show following symptoms.
• Overlapped printing images
• White lines on printing image, etc

For above cases, adjust media feed compensation value with following procedures.
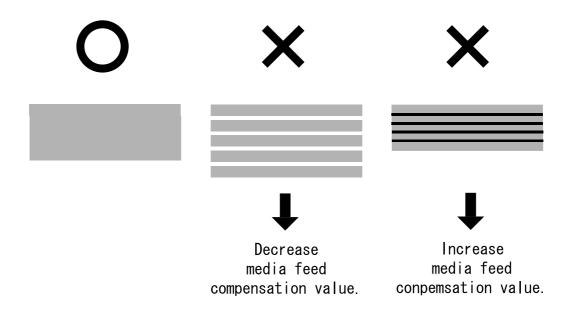
1. Display Media feed compensation menu on the operation panel by following "4.4Menu setup on the operation panel".

2. Push [F2] key on the operation panel to perform printing by media feed compensation.
    • The following messages are displayed on the operation panel.
    ☞4.4.15 Printing by Media feed compensation menu
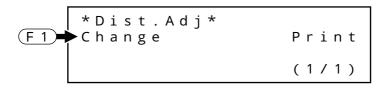
3. Confirm printing result by referring the following figure.

```
Decrease
media feed
compensation value.
```

```
Increase
media feed
conpemsation value.
```
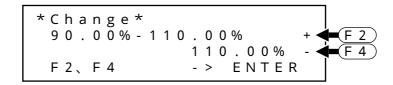
4.   When printing by media feed compensation is finished, the operation panel shifts to the menu of the previous hierarchy.
     • The following messages are displayed on the operation panel.
     ☞4.4.14 Change media feed compensation value menu

5.   Push [F1] key on the operation panel to display media feed compensation value setting menu.

6.   Set media feed compensation value by following "4.4.14Change media feed compensation value menu".

7.   Repeat procedure 2 - 6 until good printing result is obtained.

4.4 Menu setup on the operation panel

This section describes how to make the Menu settings on the operation panel, and setup items. Follow the steps below to make the Menu settings.

1. Make sure that the operation panel is normal.

2. Press the [MENU ▲] key or [MENU ▼] key on the operation panel.
    *   The screen shows the Menu.

3. Perform setting of various setup menu by following the below items.

    ☞4.4.1 Setup menu - ☞4.4.63 Long-term storage cleaning menu

    ┌─────────┐
    │ TIP   │ ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━
    └─────────┘
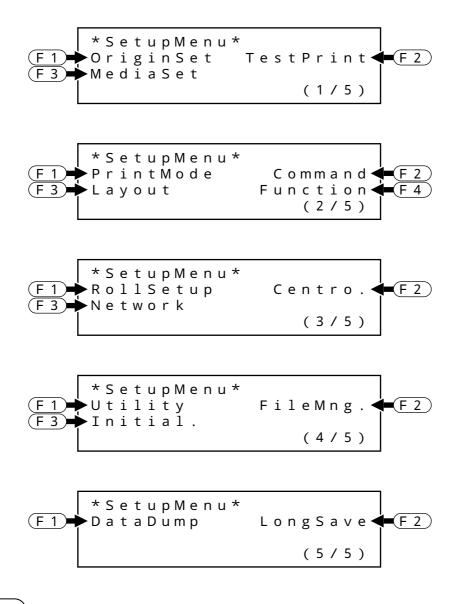
*   For functions of the operation panel when the setup menu is displayed, refer to the followings.
    *   ☞2.3.4 Operation panel
    *   ☞2.4.2 Setup menu display

*   For the structure of the setup menu, refer to the followings.
    *   ☞Setup menu structure

*   When page numbers of the setup menu is displayed on the operation panel, display sequence can be changed by pushing [MENU▲] key or [MENU▼] key.

*   < > in each table shows the parameters set at the factory (initial settings)

━━━

4.4.1 Setup menu

This section describes each setup menu of the printer.

NOTE

- Network menu is displayed when the network interface board (option) is installed.

- File management menu is displayed when the hard disk (option) is installed.

Setup items	Parameters	Descriptions
Setup menu (1/5)	Origin setting	Set the printing start position (origin) for printing data. ☞ 4.4 Menu setup on the operation panel
	Test print	Performs test printing. ☞ 4.4.3 Test print menu
	Media setting	Makes various media settings. ☞ 4.4.4 Media setup menu

Setup items	Parameters	Descriptions
Setup menu (2/5)	Print mode setting	Makes various print mode settings. ☞4.4.17 Printing mode menu
	Command setting	Makes various printer commands settings. ☞4.4.25 Command setup menu
	Layout setting	Makes various layout function settings. ☞4.4.28 Layout setup menu
	Function setting	Makes various processing printing data settings. ☞4.4.31 Function setup menu
Setup menu (3/5)	Roll media setting	Makes various roll media settings. ☞4.4.34 Roll Media setup menu
	Centronics setting	Set Centronics Interface communication mode. ☞4.4.36 Centronics menu
	Network setting	Set the network interface IP address. ☞4.4.37 Network menu
Setup menu (4/5)	Utility setting	Makes various advanced function settings. ☞4.4.38 Utility menu
	File management setting	Makes various settings for the processing method of the printing data sent from a computer to the installed hard disk in the printer. ☞4.4.44 File management setup menu
	Initialize setting	Returns the parameters to the value set at the factory. ☞4.4.50 Initialize setup menu
Setup menu (5/5)	Data dump	The dump printing for the online feature check will be performed. ☞4.4.62 Data dump menu
	Long-term storage cleaning	Cleaning for long-term storage is performed. ☞4.4.63 Long-term storage cleaning menu
Setup menu (1/5-5/5)	-	• [CANCEL] key: Cancel the setup menu, and shift to the normal condition.

⎯⎯⎯⎯(TIP)⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯

- By using the software server RIP (option), some setups for printing can be set by the RIP.
  For details, refer to the operation manual of the products.

⎯⎯

4.4.2 Origin setup menu

Set printing start position (origin) for printing data.
Set this when you want to re-print to blank area of the printed media by changing the layout of the printing data.
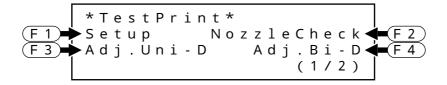
Current Parameter

Setup items	Parameters	Descriptions
Origin setting	• L: Media feed value • W: Print head movement value (Unit: mm)	Change print head position and media feed amount by operating the following keys. • [F1] key: Feeds media forward. • [F2] key: Moves the print head to the left. • [F3] key: Feeds media backward. • [F4] key: Moves the print head to the right. • [ENTER] key: Determines the setup values then return to the previous hierarchical menu. ☞4.4.1 Setup menu Y L Drawing start point Media feeding direction X W 0

TIP
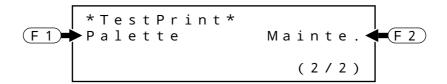
• The origin setup menu automatically ends after none of keys are pressed for a certain period, to avoid drying the print head.

4.4.3 Test print menu

Perform Test print.

PJ-1614NXE PJ-2216NXE OPERATION MANUAL   *4 Handling the printer*

Setup items	Parameters	Descriptions
Test print (1/2)	SetupPrint	Performs setup printing. ☞3.8.1 Setup List
	NozzleCheck	Performs nozzle check printing. ☞3.8.2 NozzleCheck
	Alignment (UniDir)	Performs accuracy adjustment printing in one direction. ☞3.8.3 Alignment
	Alignment (BiDir)	Performs accuracy adjustment printing in two directions. ☞3.8.3 Alignment
Test print (2/2)	Pallet printing	Performs pallet printing. ☞3.8.4 Color Palette
	Maintenance status	Maintenance status printing is performed. ☞3.8.5 Maintenance record
Test print (1/2-2/2)	-	• [CANCEL]key: shift to the previous hierarchy menu. ☞4.4.1 Setup menu

4.4.4 Media setup menu
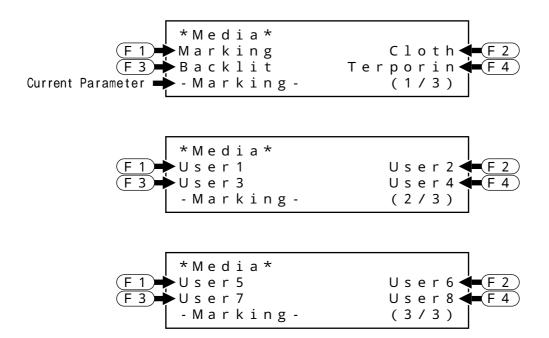
Perform various settings for media.

Setup items	Parameters	Descriptions
Media setting	Types	Makes setting for media type used for test printing. ☞4.4.5 Media type menu
	Media cutting	The method of cutting the media after printing is set here. ☞4.4.16 Media cut menu
	-	• [CANCEL]key: Shift to the previous hierarchy menu. ☞4.4.1 Setup menu

4.4.5 Media type menu

Set media type for printing.

4-13

Current Parameter

Setup items	Parameters	Descriptions
Types(1/3)	Marking film	Set when recommended media is used. Setup value for printing operation is set for each media type automatically.
	Cloth	
	Backlight film	
	<Terpolin>	
	-	When media type is set to recommended media, shift to the the previous hierarchy menu. ☞4.4.1 Setup menu
Types (2/3)	User media 1	Set when media (user media) other than recommended media are used. For setup values of printing operation, eight settings of "user media 1-8" can be set. ☞4.4.6 User media menu
	User media 2	
	User media 3	
	User media 4	
Types (3/3)	User media 5	
	User media 6	
	User media 7	
	User media 8	
Type (1/3-3/3)	-	• [CANCEL] key: Shift to the previous hierarchy menu. ☞4.4.4 Media setup menu

4.4.6 User media menu

Makes various settings on user define media.
In the User media menu, for each setup value of following printing operation, eight settings of "user media 1-8" can be set.
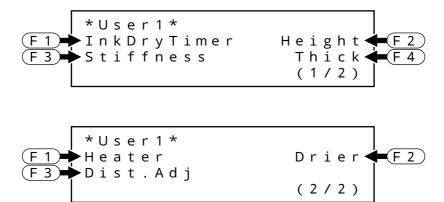
<hr>

> **NOTE**

- When medias other than the recommended medias are used (user media), the following problems may occur.
  - Media detection error
  - Obliqued, torn, and creased media
  - media jams
  - Decrease in print quality due to blurring, missing, or smudging of ink
  - End detection error of roll media

  Problems caused by using media other than the recommended will void the warranty.
  For more information, contact MUTOH local dealer.
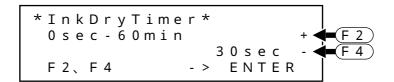
<hr>

Setup items	Parameters	Descriptions
user media 1-8 (1/2)	InkDryTime	In order to let the ink for the printing dry, the wait time from the time of work end to the next printing is set here. ☞4.4.7 InkDry menu
	HeadHeight	Set the distance (head height) from print head face to media. ☞4.4.8 HeadHeight menu
	Stiff	Makes the setting for the absorbing power of the media to the printing board depending on the hardness of the media. ☞4.4.9 Stiff menu
	Thickness	Makes the setting on the width of the media to be used. ☞4.4.10 Thickness menu
User media 1-8 (2/2)	Platen heater	The platen heater temperature during printing is set. ☞4.4.11 Platen heater menu
	Dryer	The ink dryer temperature during printing is set. ☞4.4.12 Dryer menu
	Dist.Adj	Perform various settings for media feed compensation. ☞4.4.13 Media feed compensation menu
User media1-8 (1/2-2/2)	-	• [CANCEL] key: Shift to the previous hierarchy menu. ☞4.4.5 Media type menu

4.4.7 InkDry menu
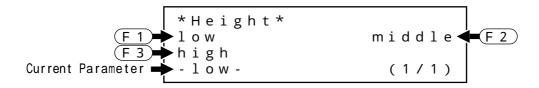
Set waiting period from the end of operation to the start of next printing to dry ink on the printed media.

Setup items	Parameters	Descriptions
InkDryTime	0 to <30 sec. > to 270 sec. to 60 min.	Change InkDry time by operating the following keys. • [F2] key: Increase setup value. • [F4] key: Decrease setup value. • [ENTER] key: Confirm setup value, shift to the previous hierarchy menu. • [CANCEL] key: Cancel setup value, shift to the previous hierarchy menu. ☞4.4.6 User media menu

4.4.8 HeadHeight menu

Set the distance (head height) from the print head face to media.
 Head height can be changed to three levels according to media thickness.

Current Parameter

Setup items	Parameters	Descriptions
HeadHeight	<Low>	Set when typical media thickness is used.
	Middle	Set when thicker media is used.
	High	Set when thickest media is used.
	-	After setting, shift to the previous hierarchy menu. ☞4.4.6 User media menu

4.4.9 Stiff menu
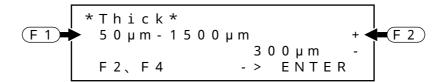
Set media sticking force to the media guide according to media stiffness.

Current Parameter ▶

Setup items	Parameters	Descriptions
Stiff	\<Normal\>	Setting for normal media
	Soft	Setting for soft media where media feeding errors and media jams may occur
	-	After setting, shift to the previous hierarchy menu. ☞4.4.6 User media menu

4.4.10 Thickness menu
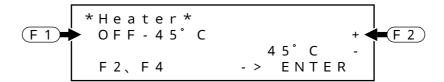
Set media thickness.

μ   μ
μ

Setup items	Parameters	Description
Thickness	50μpm to \<300μpm\> to 1500μpm	Change media thickness by operating the following keys. • [F2]key: Increase setup value. • [F4]key: Decrease setup value. • [ENTER]key: Confirm setup value, shift to the previous hierarchy menu. • [CANCEL] key: Cancel setup value, shift to the previous hierarchy menu. ☞4.4.6 User media menu

4.4.11 Platen heater menu
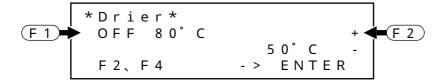
Set platen heater temperature of during printing.

Setup items	Parameters	Description
Platen heater	OFF / 25°C-<30°C>-45°C	Change Platen heater temperature by operating the following keys. • [F2] key: Increase setup value. • [F4] key: Decrease setup value. • [ENTER] key: Confirm setup value, shift to the previous hierarchy menu. • [CANCEL] key: Cancel setup value, shift to the previous hierarchy menu. ☞4.4.6User media menu

4.4.12 Dryer menu
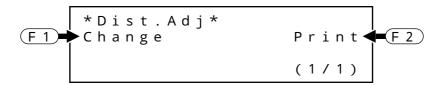
Set InkDryer temperature of during printing.

Setup items	Parameters	Description
Dryer	OFF / 50°C-<60°C>-80°C	Change InkDryer temperature by operating the following keys. • [F2] key: Increase setup value. • [F4] key: Decrease setup value. • [ENTER] key: Confirm setup value, shift to the previous hierarchy menu. • [CANCEL] key: Cancel setup value, shift to the previous hierarchy menu. ☞4.4.6 User media menu

4.4.13 Media feed compensation menu

Perform various settings for media feed compensation

Setup items	Parameters	Description
Dist.Adj	Change	Change media feed compensation value. ☞ 4.4.14 Change media feed compensation value menu
	Printing	Perform printing by media feed compensation. ☞ 4.4.15 Printing by Media feed compensation menu
	-	• [CANCEL]key: Shift to the previous hierarchy menu. ☞ 4.4.6 User media menu

4.4.14 Change media feed compensation value menu

Change media feed compensation value.

Setup items	Parameters	Description
Change	90.00%-<100.00S>-110.00%	Change InkDry time by operating the following keys. • [F2] key: Increase setup value. • [F4] key: Decrease setup value. • [ENTER] key: Confirm setup value, shift to the previous hierarchy menu. • [CANCEL] key: Cancel setup value, shift to the previous hierarchy menu. ☞ 4.4.13 Media feed compensation menu

4.4.15 Printing by Media feed compensation menu

Perform printing by media feed compensation.

Setup items	Parameters	Description
Dist.Adj	Data printing	Now printing by media feed compensation. Wait for a while until printing is finished. After printing, shift to the previous hierarchy menu. ☞4.4.13 Media feed compensation menu
	-	• [CANCEL] key: Products perform following operations. • Printing by media feed compensation is canceled. • Eject media. • Shift to the previous hierarchy menu. ☞4.4.13 Media feed compensation menu

4.4.16 Media cut menu
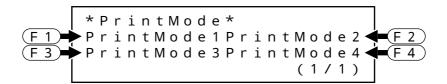
Set media cut method after printing.

```
                    ┌────────────────────────────┐
         ◯━━▶       │                            │       ◀━━◯
                    │                            │
Current Parameter ━▶│                            │
                    └────────────────────────────┘
```

Setup items	Parameters	Descriptions
Media cutting	Off	No media feed after printing.
	Manual	Feed media to the media cut position after printing. ☞4.6.1 Roll media cutting procedure
	-	After setting, shift to the previous hierarchy menu. ☞4.4.4 Media setup menu

4.4.17 Printing mode menu

Perform various settings for Printing mode.

```
                    ┌────────────────────────────┐
         ◯━━▶       │                            │       ◀━━◯
         ◯━━▶       │                            │       ◀━━◯
                    │                            │
                    └────────────────────────────┘
```

Setup items	Parameters	Descriptions
Print mode setup	Print mode 1	For each setup value of Printing mode, four settings of "Printing mode 1" - "Printing mode 4" can be set. ☞4.4.18 Printing mode setup menu
	Print mode 2	
	Print mode 3	
	Print mode 4	
	-	• [CANCEL] key: Shift to the previous hierarchy menu. ☞4.4.1 Setup menu

4.4.18 Printing mode setup menu

Perform various settings for Printing mode.
For each setup value of Printing mode, four settings of "Printing mode 1" - "Printing mode 4" can be set.
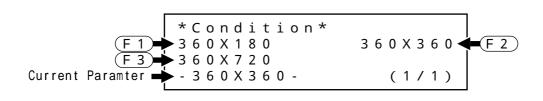
Setup items	Parameters	Descriptions
Printing mode 1-4	Printing quality	Set printing quality. ☞4.4.19 Printing quality menu
	Printing direction	Set print head moving direction for printing. ☞4.4.21 Printing direction menu
	Printing Repeat	Perform various settings when printing is repeated with one printing data. ☞4.4.22 Printing repeat menu
	-	• [CANCEL] key: Shift to the previous hierarchy menu. ☞4.4.1 Setup menu

4.4.19 Printing quality menu

Set printing quality.
Select printing quality with consideration to applications of printing data and printing speed.
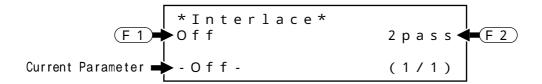
Current Paramter

Setup items	Parameters	Descriptions
Quality	360×180dpi	The display changes to interlace setup items after the print quality items settings are finished.
	<360×360dpi>	☞4.4.20 InterLace Setup menu
	360×720dpi	
	-	• [CANCEL] key: Shift to the previous hierarchy menu. ☞4.4.18Printing mode setup menu

4.4.20 InterLace Setup menu

Set InterLace for printing.

Current Parameter

Setup items	Parameters	Descriptions
Interlace method	Off	Interlace function is not used.
	2-path	Ink is discharged two times per line.
	-	After setting, shift to the previous hierarchy menu. ☞4.4.18 Printing mode setup menu

4.4.21 Printing direction menu

Set print head moving direction for printing.

Current Parameter

Setup items	Parameters	Descriptions
Direction	UniDir	Prints in one direction.
	BiDir	Prints bi-directionally.
	-	After setting, shift to the previous hierarchy menu. ☞4.4.18 Printing mode setup menu
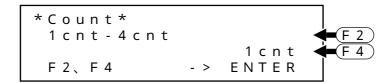
4.4.22 Printing repeat menu

Perform various settings when printing is repeated with one printing data.

PJ-1614NXE PJ-2216NXE OPERATION MANUAL　　　　　　　　*4 Handling the printer*

Setup items	Parameters	Descriptions
Repeat	Times	Makes settings for the number of print repeat on a print data. ☞4.4.23 Repeat times menu
	Interval	Makes settings for the end of printing to the start of printing. ☞4.4.24 Interval time menu
	-	After setting, shift to the previous hierarchy menu. ☞4.4.18 Printing mode setup menu

4.4.23 Repeat times menu
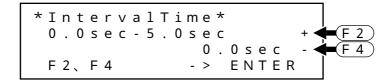
Set repeat times of printing with one printing data.

Setup items	Parameters	Descriptions
Times	<Once> to 4 times	Change repeat times by operating the following keys. • [F2] key: Increase setup value. • [F4] key: Decrease setup value. • [ENTER] key: Confirm setup value, shift to the previous hierarchy menu. • [CANCEL] key: Cancel setup value, shift to the previous hierarchy menu. ☞4.4.22 Printing repeat menu

4.4.24 Interval time menu

Set time from printing finish to next printing start.

Setup items	Parameters	Descriptions
Interval	<0.0 sec.> to 0.1 to 5.0 sec.	Change interval time by operating the following keys. • [F2] key: Increase setup value. • [F4] key: Decrease setup value. • [ENTER] key: Confirm setup value, shift to the previous hierarchy menu. • [CANCEL] key: Cancel setup value, shift to the previous hierarchy menu. ☞ 4.4.22 Printing repeat menu

4.4.25 Command setup menu
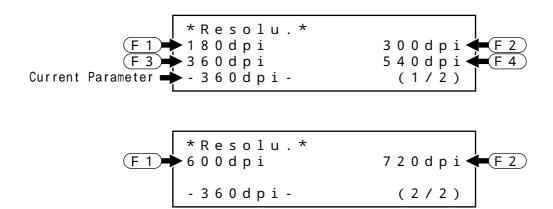
Perform various settings for printer commands.

Setup items	Parameters	Descriptions
Command setup	ImageResolu.	Makes settings for image resolution while printing with image data. ☞ 4.4.26 Image resolution menu
	OnlineTimer	Makes settings for the time from the end of receiving printing data from a computer to recognizing the end of printing data. ☞ 4.4.27 Online time out menu
	-	• [CANCEL] key: Shift to the previous hierarchy menu. ☞ 4.4.1 Setup menu

4.4.26 Image resolution menu
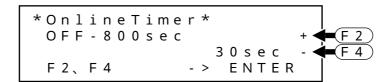
Set resolution for image data for printing.

Current Parameter

Setup items	Parameters	Descriptions
Image resolution (1/2)	180dpi	Makes settings for image resolution while printing with image data.
	300dpi	
	<360dpi>	
	540dpi	
Image resolution (1/2)	600dpi	
	720dpi	
Image resolution (1/2-2/2)	-	After setting, shift to the previous hierarchy menu. ☞4.4.25 Command setup menu

4.4.27 Online time out menu

Set time from the moment of receiving termination of printing data sent by computer to the recognition of end of printing data.

Setup items	Parameters	Descriptions
OnlineTimer	OFF/2sec. - <30sec.> - 800sec.	Change the Online time out time by operating the following keys. • [F2] key: Increase setup value. • [F4] key: Decrease setup value. • [ENTER] key: Confirm setup value, shift to the previous hierarchy menu. • [CANCEL] key: Cancel setup value, shift to the previous hierarchy menu. ☞4.4.25 Command setup menu

4.4.28 Layout setup menu
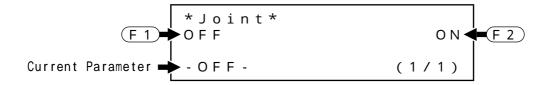
Makes various settings on layout function.

Setup items	Parameters	Descriptions
Layout	Stitch	Makes settings for stitching print. ☞4.4.29 Joint printing menu
	Connecting margin	In the connected printing item, when set to 'ON', the media feed direction margin for the second media and on is set here. ☞4.4.30 Joint margin menu
	-	• [CANCEL] key: Shift to the previous hierarchy menu. ☞4.4.1 Setup menu

4.4.29 Joint printing menu
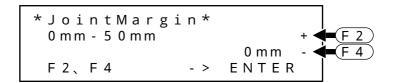
Set joint printing.

Setup items	Parameters	Descriptions
Stitch	<Off>	Does not perform stitching print.
	On	Performs stitching print
	-	After setting, shift to the previous hierarchy menu. ☞4.4.28 Layout setup menu

4.4.30 Joint margin menu

In the joint printing item, when set to "ON", the media feed direction' margin for the second media and on is set here.

| Setup items	Parameters	Descriptions
Connecting margin	<0mm> to 50mm	Change joint margin by operating the following keys. • [F2] key: Increase setup value. • [F4] key: Decrease setup value. • [ENTER] key: Confirm setup value, shift to the previous hierarchy menu. • [CANCEL] key: Cancel setup value, shift to the previous hierarchy menu. ☞4.4.28 Layout setup menu

4.4.31 Function setup menu
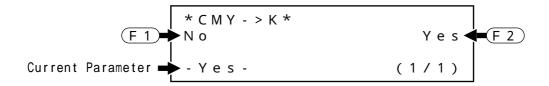
Perform various settings for processing of printing data.

Setup items	Parameters	Descriptions
Function setup	CMY→K	Makes settings for printing method to present black. ☞4.4.32 CMY→K menu
	Mirror	Set this to draw reversed printing data. ☞4.4.33 Mirror menu
	-	• [CANCEL] key: Shift to the previous hierarchy menu. ☞4.4.1 Setup menu

4.4.32 CMY→K menu

Set how to draw black.

Current Parameter

Setup items	Parameters	Descriptions
CMY→K	<No>	Use CMY (color) ink and K (black) ink together.
	Yes	Always use K (black) ink.
	-	After setting, shift to the previous hierarchy menu. ☞4.4.31 Function setup menu

4.4.33 Mirror menu

Set this to print reversed printing data.

Current Parameter

Setup items	Parameters	Descriptions
Mirror	<Off>	No reversal of printing data.
	Y-axis ON	Set this for printing when data is reversed to Y-axis.
	-	After setting, shift to the previous hierarchy menu. ☞4.4.31 Function setup menu

4.4.34 Roll Media setup menu

Perform various settings for roll media.

Setup items	Parameters	Descriptions
Roll media setup	Null	Set this when roll media setup is not used.
	Roll media 1	For each setup value of roll media, 3 settings of "roll media 1" - "Roll media 3" can be set. ☞4.4.35 Roll media length menu
	Roll media 2	
	Roll media 3	
	-	• [CANCEL] key: Shift to the previous hierarchy menu. ☞4.4.1 Setup menu

4.4.35 Roll media length menu

Set roll media length.

Setup items	Parameters	Descriptions
roll media 1-4	1 m to <30 m> to 99 m	Change roll media length by operating the following keys. • [F2] key: Increase setup value. • [F4] key: Decrease setup value. • [ENTER] key: Confirm setup value, shift to the previous hierarchy menu. • [CANCEL] key: Cancel setup value, shift to the previous hierarchy menu. ☞4.4.34 Roll Media setup menu

4.4.36 Centronics menu

Set communication mode to Centronics interface.

Current Parameter

Setup items	Parameters	Descriptions
Centronics	Centronics	Set communication mode to Centronics mode.
	<Bi Centro>	Set communication mode to Bi-Centronics mode.
	-	After setting, shift to the previous hierarchy menu. ☞4.4.1 Setup menu
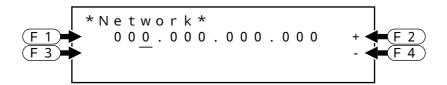
4.4.37 Network menu

Set IP address for network interface.
Set this when products are used in the network environment.

NOTE
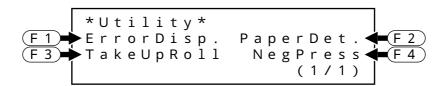
- Network menu can be set when the network interface board (option) is installed to products.

Setup items	Parameters	Descriptions
Network	000.000.000.000 to <192.034.043.015> to 255.255.255.255	Change IP address by operating the following keys. • [F1] key: Shift digit position of to-be-changed setup value to left. • [F2] key: Increase setup value. • [F3]key: Shift digit position of to-be-changed setup value to right. • [F4] key: Decrease setup value. • [ENTER] key: Confirm setup value, shift to the previous hierarchy menu. • [CANCEL] key: Cancel setup value, shift to the previous hierarchy menu. ☞4.4.1 Setup menu

4.4.38 Utility menu

Perform various settings for application functions of products.

Setup items	Parameters	Descriptions
Utility	ErrorDisplay	Set display method to the operation panel when minor error occurred. ☞4.4.39 ErrorDisplay menu
	Media detection	When media is initialized, set whether to perform detection of width and edge of the media. ☞4.4.40 Media detection menu
	Take-up mechanism	Set take-up mechanism operation for printing. ☞4.4.42 Take-up mechanism menu
	Negative pressure pump	Set operating pressure of negative pressure pump. ☞4.4.43 Negative pressure pump menu
	-	• [CANCEL] key: Shift to the previous hierarchy menu. ☞4.4.1 Setup menu

4.4.39 ErrorDisplay menu
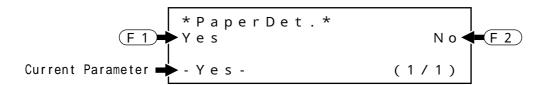
Set display method to the operation panel when minor error occurred.

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         ◖───▶      │                         │      ◀───◗
                    │                         │
Current Parameter ▶ │                         │
                    └─────────────────────────┘
```

Setup items	Parameters	Descriptions
ErrorDisplay	<Off>	No ErrorDisplay.
	On	Perform ErrorDisplay.
	-	After setting, shift to the previous hierarchy menu. ☞4.4.38 Utility menu

4.4.40 Media detection menu

When media is initialized, set whether to perform detection of width and edge of the media.

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         ◖───▶      │                         │      ◀───◗
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Current Parameter ▶ │                         │
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Setup items	Parameters	Descriptions
media detect	<ON>	Perform media detection automatically. After setting, shift to the previous hierarchy menu. ☞4.4.38 Utility menu
	OFF	No media detection. When "OFF" is set, go to the Media width setup menu. ☞4.4.41 Media width menu
	-	• [CANCEL] key: Shift to the previous hierarchy menu. ☞4.4.38 Utility menu

---

TIP

• When setup value is changed from "OFF" to "ON" in the media detection menu, go to the media initial menu.
  • ☞3.5 Refilling the ink - jet wash fluid

4.4.41 Media width menu
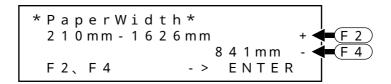
When media detection will not be performed during initialization of the media, the width of the media set is set here.

They can be set in the following ranges:
• PJ-1614NXE:210mm-1626mm
• PJ-2216NXE:210mm-2210mm

NOTE

• If the set value is larger than the media width set by the media width menu, media and product may be tainted by ink during printing.

Setup items	Parameters	Descriptions
media width	• PJ-1614NXE:210mm-<841mm>-1626mm • PJ-2216NXE:210mm-<841mm>-2210mm	Change media width by operating the following keys. • [F2] key: Increase setup value. • [F4] key: Decrease setup value. • [ENTER] key: Confirm setup value, shift to the previous hierarchy menu. • [CANCEL] key: Cancel setup value, shift to the previous hierarchy menu. ☞4.4.38 Utility menu

4.4.42 Take-up mechanism menu
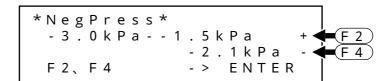
Set take-up mechanism operation during printing.

Current Parameter ➡

Setup items	Parameters	Descriptions
Winding unit	<OFF>	No use of take-up mechanism.
	ON	Use take-up mechanism.
	-	After setting, shift to the previous hierarchy menu. ☞4.4.38 Utility menu

4.4.43 Negative pressure pump menu

The operational pressure of the vacuum pump is set here.
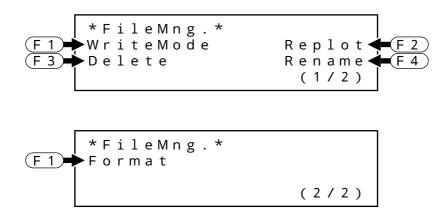
Setup items	Parameters	Descriptions
Vacuum pump	-3.0kPa-<-2.1kPa>--1.5kPa	Change operating pressure of negative pressure pump by operating the following keys. • [F2] key: Increase setup value. • [F4] key: Decrease setup value. • [ENTER] key: Confirm setup value, shift to the previous hierarchy menu. • [CANCEL] key: Cancel setup value, shift to the previous hierarchy menu. ☞4.4.38 Utility menu

4.4.44 File management setup menu

Makes various settings for the processing method of the printing data sent from a computer to the installed hard disk in the printer.

NOTE

• File management menu items can be set when the hard disk (option) is installed on the product.
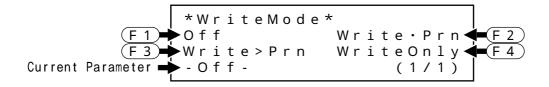
Setup items	Parameters	Descriptions
File management (1/2)	Write mode	Set writing method of printing data to the hard disk and printing method. ☞4.4.45 Write mode menu
	Re-plot	Set this when you want to draw the printing data saved in the hard disk. ☞4.4.46 Re-plot menu
	Delete	Set this when deleting the printing data saved in the hard disk. ☞4.4.47 File delete menu
	Re-name	Change file name of the printing data saved in the hard disk. ☞4.4.48 Re-name menu
File management (2/2)	Format	Perform formatting of hard disk. ☞4.4.49 Format menu
File management (1/2-2/2)	-	• [CANCEL] key: Shift to the previous hierarchy menu. ☞4.4.1 Setup menu

4.4.45 Write mode menu

Set writing method of printing data to the hard disk and printing method.

NOTE

• Write mode menu can be set when the hard disk (option) is installed.

Current Parameter

Setup items	Parameters	Descriptions
Writing	<Off>	No writing to the hard disk. Perform printing immediately.
	Writing/Printing	Prints while writing the data to the hard disk.
	Printing after writing	Prints after writing the data to the hard disk.
	Writing only	Writes the data to the hard disk without printing. In the re-print setup items you can make settings for the processing method of the printing data stored in the hard disk. TIP • Printing method can be set for printing data saved in the hard disk by Re-plot menu. ☞4.4.46 Re-plot menu
	-	After setting, shift to the previous hierarchy menu. ☞4.4.44 File management setup menu

4.4.46 Re-plot menu

Set following items when you want to draw printing data saved in the hard disk.
• File name
• Printing media number

NOTE

•   Re-plot menu can be set when hard disks (option) are installed.

Setup items	Parameters	Descriptions
Re-print	File name	Select file name to be printed by operating the following keys. • [F1] key: Select file name with back feed way. • [F3] key: Select file name with forward feed way.
	Number: 0 to 99	Change printing media number by operating the following keys. • [F2] key: Increase setup value. • [F4] key: Decrease setup value.
	-	[ENTER] key: • Confirm setup value. • Product starts printing. • After printing, shift to normal condition.
		[CANCEL]key: Cancel setup value, shift to the previous hierarchy menu. ☞4.4.44 File management setup menu

4.4.47 File delete menu

Set this when you delete printing data saved in the hard disk.

NOTE ▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬

- File delete menu can be set when hard disks (option) are installed.

- If you delete file by the File delete menu, you can not retrieve that file again.
  If you want to use the deleted file again, send the printing data to the hard disk of the product from the computer again.

▬▬

Setup items	Parameters	Descriptions
Delete	File name	Select to-be-deleted file name by operating the following keys. • [F1] key: Select file name with back feed way. • [F3] key: Select file name with forward feed way. • [ENTER] key: Delete selected file, shift to the previous hierarchy menu. • [CANCEL] key: Cancel setup value, shift to the previous hierarchy menu. ☞4.4.44 File management setup menu

4.4.48 Re-name menu
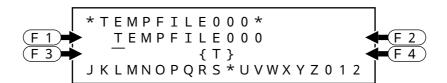
Change file name for printing data saved in the hard disk.

NOTE

• Re-name menu can be set when hard disks (option) are installed.

Setup items	Parameters	Descriptions
Rename	File name	Select to-be-changed file name by operating the following keys. • [F1] key: Select file name with back feed way. • [F3] key: Select file name with forward feed way. • [ENTER] key: Confirm setup value. The following messages are displayed on the operation panel. • [CANCEL] key: Cancel setup value, shift to the previous hierarchy menu. ☞4.4.44 File management setup menu
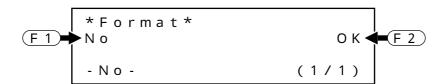
Setup items	Parameters	Descriptions
To-be-changed file name	Characters you want to change	Select characters you want to change by operating the following keys. • [F1] key: Select characters you want to change with back feed way. • [F3] key: Select characters you want to change with forward feed way.
	Characters you can useÅFA-Z or 0-9	Select to-be-changed characters by operating the following keys. • [F2] key: Select to-be-changed characters with back feed way. • [F4] key: Select to-be-changed characters with forward feed way.
	-	• [ENTER] key: Confirm setup value, shift to the previous hierarchy menu. • [CANCEL] key: Cancel setup value, shift to the previous hierarchy menu. ☞4.4.44 File management setup menu

4.4.49 Format menu

Perform formatting of the hard disk.

NOTE

- File name change menu can be set when hard disks (option) are installed.

- If formatting of the hard disk is performed, all data saved in the hard disk will be deleted.
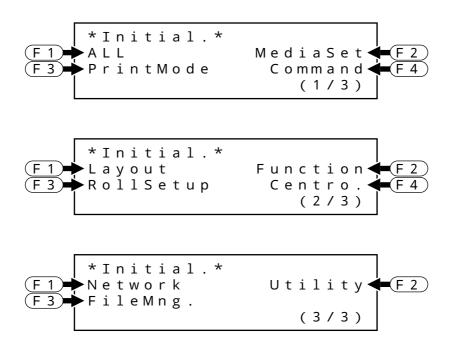
Setup items	Parameters	Descriptions
Format	No	Format is not performed.
	-	• [CANCEL] key: Cancel setup value, shift to the previous hierarchy menu. ☞4.4.44 File management setup menu
	Yes	Perform formatting.

Setup items	Parameters	Descriptions
Format	Format will be performed. OK?	• [ENTER] key: • Product starts formatting. • The following messages are displayed on the operation panel. • After formatting, shift to the previous hierarchy menu. ☞4.4.44 File management setup menu
		• [CANCEL] key: • Formatting will not be performed. • Shift to the previous hierarchy menu. ☞4.4.44 File management setup menu

4.4.50 Initialize setup menu
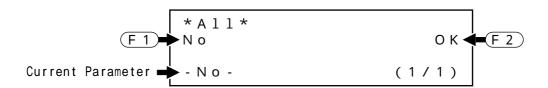
Returns parameters to the factory setting.

Setup items	Parameters	Descriptions
Initialize (1/3)	All	Returns all parameters to the factory setting. ☞4.4.51 All Initialize menu
	MediaSet	Returns parameters in the media setup menu to the factory setting. ☞4.4.52 Media setup Initialize menu
	PrintMode	Returns parameters in the print mode menu to the factory setting. ☞4.4.53 Printing mode initialize menu
	Command	Returns parameters in the command setup menu to the factory setting. ☞4.4.54 Command setup Initialize menu
Initialize (2/3)	Layout	Returns parameters in the layout setup menu to the factory setting. ☞4.4.55 Layout Setup Initialize menu
	Func.	Returns parameters in the function setup menu to the factory setting. ☞4.4.56 Function setup Initialize menu
	Roll media	Returns parameters in the roll media setup menu to the factory setting. ☞4.4.57 Roll media setup Initialize menu
	Interface	Returns parameters in the Centronics setup menu to the factory setting. ☞4.4.58 Centronics Initialize menu
Initialize (3/3)	Network	Returns parameters in the network setup menu to the factory setting. ☞4.4.59 Network Initialize menu
	Utility	Returns parameters in the utility setup menu to the factory setting. ☞4.4.60 Utility Initialize menu
	File management	The file management setup menu values are reset to factory default settings. ☞4.4.61 File management Initialize menu
Initialize (1/3-3/3)	-	• [CANCEL] key: Shift to the previous hierarchy menu. ☞4.4.1 Setup menu

4.4.51 All Initialize menu

All setup values are set to the setup value (initial value) at the factory shipping.

Current Parameter

Setup items	Parameters	Descriptions
All Initialize	<NO>	No initialization.
	Yes	Perform initialization.
	-	After setting, shift to the previous hierarchy menu. ☞4.4.50 Initialize setup menu

4.4.52 Media setup Initialize menu
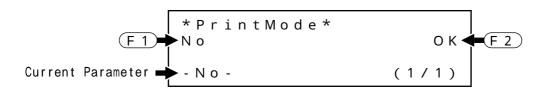
Setup values of Media setup menu are set to the setup value (initial value) at the factory shipping.

Current Parameter

Setup items	Parameters	Descriptions
Media setup Initialize	<NO>	No initialization.
	Yes	Perform initialization.
	-	After setting, shift to the previous hierarchy menu. ☞4.4.50 Initialize setup menu

4.4.53 Printing mode initialize menu
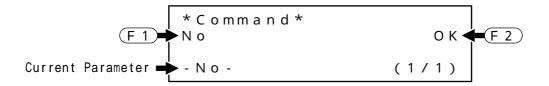
Setup values of Printing mode menu are set to the setup value (initial value) at the factory shipping.

Current Parameter

Setup items	Parameters	Descriptions
Printing mode initialize	<NO>	No initialization.
	Yes	Perform initialization.
	-	After setting, shift to the previous hierarchy menu. ☞4.4.50 Initialize setup menu

4.4.54 Command setup Initialize menu
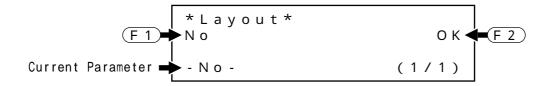
Setup values of CommandSetup menu are set to the setup value (initial value) at the factory shipping.

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Current Parameter ━━► │                                     │
          └─────────────────────────────────────┘
```

Setup items	Parameters	Descriptions
Command setup Initialize	<NO>	No initialization.
	Yes	Perform initialization.
	-	After setting, shift to the previous hierarchy menu. ☞4.4.50 Initialize setup menu

4.4.55 Layout Setup Initialize menu

Setup values of Layout Setup menu are set to the setup value (initial value) at the factory shipping.

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          │                                     │
Current Parameter ━━► │                                     │
          └─────────────────────────────────────┘
```

Setup items	Parameters	Descriptions
Layout Setup Initialize	<NO>	No initialization.
	Yes	Perform initialization.
	-	After setting, shift to the previous hierarchy menu. ☞4.4.50 Initialize setup menu

4.4.56 Function setup Initialize menu

Setup values of Function setup menu are set to the setup value (initial value) at the factory shipping.

```
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          │                                     │
Current Parameter ━━► │                                     │
          └─────────────────────────────────────┘
```

Setup items	Parameters	Descriptions
Function setup Initialize	<NO>	No initialization.
	Yes	Perform initialization.
	-	After setting, shift to the previous hierarchy menu. ☞4.4.50 Initialize setup menu

4.4.57 Roll media setup Initialize menu

Setup values of Roll Media setup menu are set to the setup value (nitial value) at the factory shipping.

Setup items	Parameters	Descriptions
Roll media setup Initialize	<NO>	No initialization.
	Yes	Perform initialization.
	-	After setting, shift to the previous hierarchy menu. ☞4.4.50 Initialize setup menu

4.4.58 Centronics Initialize menu

Setup values of Centronics menu are set to the setup value (initial value) at the factory shipping.

Setup items	Parameters	Descriptions
Centronics Initialize	<NO>	No initialization.
	Yes	Perform initialization.
	-	After setting, shift to the previous hierarchy menu. ☞4.4.50 Initialize setup menu

4.4.59 Network Initialize menu

Setup values of Network menu are set to the setup value (initial value) at the factory shipping.

Setup items	Parameters	Descriptions
Network Initialize	<NO>	No initialization.
	Yes	Perform initialization.
	-	After setting, shift to the previous hierarchy menu. ☞4.4.50 Initialize setup menu

4.4.60 Utility Initialize menu
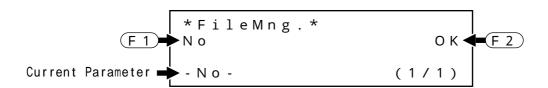
Setup values of Utility menu are set to the setup value (initial value) at the factory shipping.

Current Parameter ➡

Setup items	Parameters	Descriptions
Utility Initialize	<NO>	No initialization.
	Yes	Perform initialization.
	-	After setting, shift to the previous hierarchy menu. ☞4.4.50 Initialize setup menu

4.4.61 File management Initialize menu
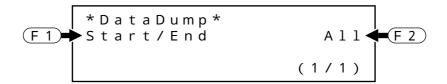
Setup values of File management menu are set to the setup value (initial value) at the factory shipping.

Current Parameter ➡

Setup items	Parameters	Descriptions
File management Initialize	<NO>	No initialization.
	Yes	Perform initialization.
	-	After setting, shift to the previous hierarchy menu. ☞4.4.50 Initialize setup menu

4.4.62 Data dump menu

Perform dump printing for online function check.
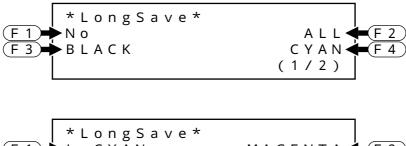
Setup items	Parameters	Descriptions
Data Dump	Start/End All	**NOTE** • Damp printing is used by service person to check the functions of the printer.Do not use this function for normal printing.
	-	After setting, shift to the previous hierarchy menu. ☞4.4.1 Setup menu

4.4.63 Long-term storage cleaning menu

Perform process for Long-term storage cleaning.

TIP

• For operation procedures for Long-term storage cleaning, refer to "5.4Long-term storage cleaning".

Setup items	Parameters	Descriptions
Long-term storage cleaning (1/2)	No	Does not perform the cleaning for long-term storage. Shift to the previous hierarchy menu. ☞4.4.1 Setup menu
	ALL	Cleaning for long-term storage is performed individually for each color in order.
	Black	Cleaning for long-term storage is performed for the selected print head color.
	Cyan	
Long-term storage cleaning (2/2)	Light Cyan (PJ-2216NXE only)	
	Magenta	
	Light Magenta (PJ-2216NXE only)	
	Yellow	
Long-term storage cleaning (1/2-2/2)	-	• [CANCEL] key: Shift to the previous hierarchy menu. ☞4.4.1 Setup menu

4.5 Operating from the operation panel

This section describes functions operated on the operational panel when the printer is in the normal status.

> **TIP**
>
> For information of the name and function of each key, refer to "2.3.4 Operation panel".

4.5.1 To stop printing operation

If you want to stop the printing operation, follow the steps below.

1. Press the [F1] key on the operation panel.

   - The printer works as follows.

Status of the printer	Operation after the [F2] key is pressed
While printing	Stops printing and deletes data of a file remaining in the printer.
While receiving/ converting	Deletes the data already received and converted, then deletes data from now on.
While waiting for the ink drying time	Stops waiting for the ink drying time and discharges the media.

4.5.2 Operating the pressurizing roller

When you want to switch the up and down of the pressurizing roller follow the steps below.
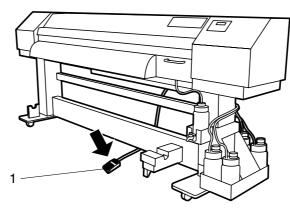
1. Press the [F2] key on the operation panel.

   - The printer works as follows.

Status of the printer	Operation after the [F2] key is pressed
• The pressurizing roller is lowered • The MEDIA SET lamp is not lit	• The pressurizing roller is lifted • The MEDIA SET lamp is lit (green)
• The pressurizing roller is up • The MEDIA SET lamp is flashing (green)	• The pressurizing roller goes down • The MEDIA SET lamp will turn off.

NOTE

- You can also switch the up and down of the pressurizing roller using the foot switch in stead of the operation panel.

No	Name
1	Foot switch

4.5.3 Winding the roll media

After setting the roll media in the unit, it is possible to wind the roll media with the following procedure. Perform winding of the media according to the procedure below.

⚠ CAUTION
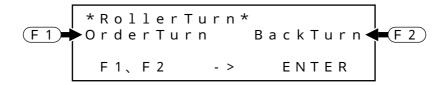
- **During the winding operation, make sure to keep hands and fingers clear of moving parts.**

1. Verify the following regarding the condition of the unit.
   - That it is not currently printing

2. Press the [F3] key of the control panel.
   - Moves to the take-up menu.

```
                                           4-49
```

3. Press the [F1] key or the [F2] key on the control panel

    • The unit will perform the following operations:

Key name	Operation when the key is pressed.
[F1] key	• The winding direction rotates in the advance direction • The roll media will be wound up by the winding unit.
[F2] key	• The winding unit rotates in the reverse direction • The roll media will be unrolled back out of the winding unit.

NOTE
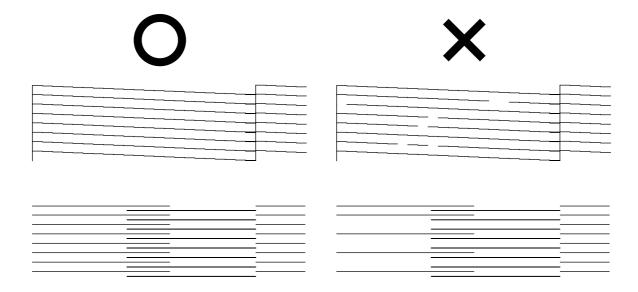
• If "OFF" is selected in the winding unit setup menu, the winding unit will not operate even if the key is pressed.

4.5.4 Head cleaning
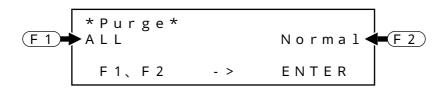
If the printed screen is smeared or misprinted, perform cleaning of the print head surface and the nozzles (head cleaning).

Perform head cleaning according to the following procedures.

1. Verify that the product is at a normal status.

2.   Follow "3.8 Testprinting", and perform nozzle check printing

3.   Refer to the illustration below to verify the condition of the print head.

4. Perform head cleaning according to "3.7 Head cleaning before printing".

TIP

- For the settings on the purge menu, see the following.

- The < > in the table are default factory settings (initial values).

Setup items	Key name	Parameters	Descriptions
Ink color	[F1] key	<All>	The ink color to be purged is selected
		Black	• All: Print head purge processes are performed for each color
		Cyan	• Other: Print head purge processes are performed for the selected color
		Light Cyan (PJ-2216NXE only)	
		Magenta	
		Light Magenta (PJ-2216NXE only)	
		Yellow	
Purge mode	[F2] key	Light	The amount of ink discharged during the purge process is selected.
		<Normal>	
		Strong	

5. After head cleaning, perform nozzle check printing again, and check the condition of the head.

NOTE

- If the smearing or misprinting is not solved after performing cleaning one time, change the purge mode to "strong" then repeat the head cleaning.

- If the smearing or misprinting is not solved after performing cleaning a few times, see "6 Trouble shooting", and take appropriate measures.

4.6 Operations after printing

The operations performed after printing is described here.

4.6.1 Roll media cutting procedure

The roll media cutting procedure is described.
Cut the roll media according to the following procedure.
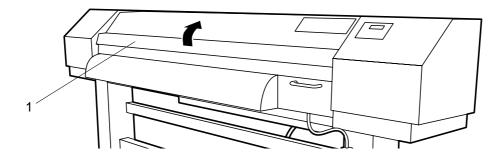
> ⚠ **CAUTION**
>
> ● **Immediately after printing, the media guide and the platen is very hot. Perform work after the media guide and the platen has cooled off.**

(1) When "Manual" is selected in the media cut menu

1. After printing, the roll media will automatically advance to the media cut position.
    • The following message is displayed on the operation panel.

2. Open the front cover.

> ⚠ **CAUTION**
>
> ● **When opening/closing the front cover, be careful not to get fingers caught in the lid.**

1
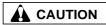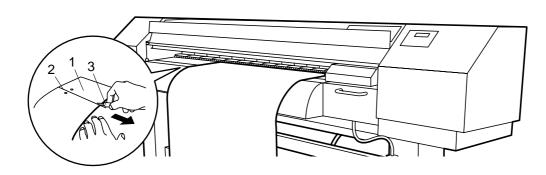
No.	Name
1	Front Cover

3. Place a razor blade on the media cut groove on the platen, and cut the roll media.
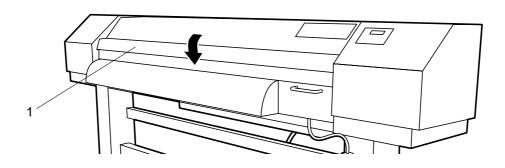
⚠ **CAUTION**

● **When cutting the roll media, be careful of the following. Incorrect handling can result in injury to the hands and fingers from the razor blade.**
   ● **When holding the media, do not place fingers over the media cut groove.**
   ● **Move the razor blade slowly along the media cut groove.**

No.	Name
1	Platen
2	media cut groove
3	Razor blade

4. Close the front cover.

No.	Name
1	Front cover

5. Press the [ENTER] key of the control panel
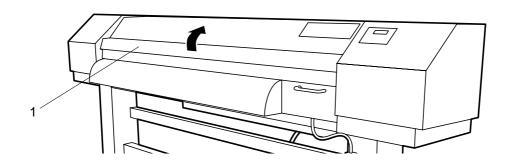
The unit enters the normal status

```

```

6. Cutting of the roll media is ended.

(2) When "OFF" is selected in the media cut menu

1. Verify the following items in the operational status of the unit.
   • The printing operation is to be finished.
   • The control panel is to be in a normal status.
   • The control panel MEDIA SET lamp is to be unlit.

2. When altering the position where the roll media is to be cut, do so in the home position setup menu in "4.4Menu setup on the operation panel", and advance the roll media to the position that needs to be cut.

3. Open the front cover.

⚠ **CAUTION**

When opening/closing the front cover, be careful not to get fingers caught in the lid.
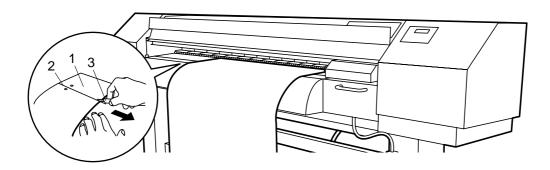
No.	Name
1	Front Cover

4. The roll media is cut along the media cut groove on the platen with a razor blade.
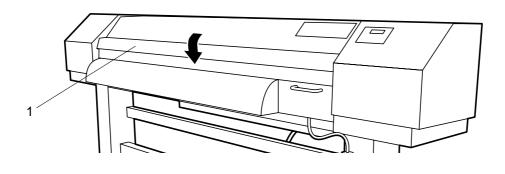
> ⚠ **CAUTION**
>
> - **When cutting the roll media, be careful of the following. Incorrect handling can result in injury to the hands and fingers from the razor blade.**
>   - **When holding the media, do not place fingers over the media cut groove.**
>   - **Move the razor blade slowly along the media cut groove.**

No.	Name
1	Platen
2	media cut groove
3	Razor Blade

5. Close the front cover.

No.	Name
1	Front cover

6. Cutting of the roll media is ended.

4.6.2 Disposal of waste fluids

The time for disposal and disposal method of waste fluid is described below.

(1) Time of Disposal

Dispose of waste fluids during the following conditions:
a) After finishing printing operation
b) When the message "Warning WasteInk Tank" is displayed on the operation panel.
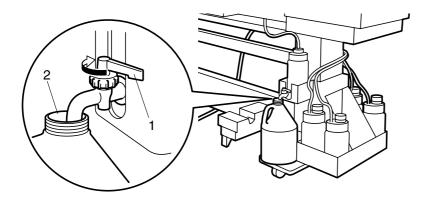
(2) Disposal method

Dispose of the waste fluid according to the following procedure.
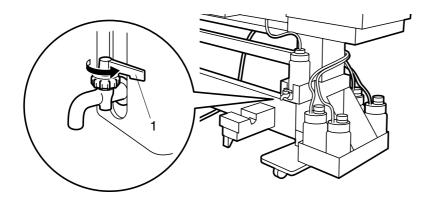
⚠ **WARNING**

- **The waste fluid from the printer is a waste oil (waste ink) of industrial waste. Proper waste fluid disposal according to industrial waste disposal laws and ordinances of your local governments are required.**

1. Verify that the power of the unit is OFF.

2. Ready an empty container such as a used supply ink bottle, to contain the waste fluid

3. Open the waste fluid valve, and transfer the waste fluid to the container.

No.	Name
1	Waste fluid valve
2	Empty container

4. After transferring the waste fluid to the empty container, close the waste fluid valve securely.

No.	Name
1	Waste fluid valve

5. Dispose of the waste fluid as an industrial waste product.

5 MAINTENANCE

<Memo>

5 Maintenance

5.1 Introduction

This chapter explains daily maintenance of the printer.

5.2 Replacing consumables

This section explains how to refill the ink and the jet wash liquid, and when and how to replace the roll media and the ink filter.

5.2.1 Refilling the ink and jet wash liquid

Read the following for information on when and how to refill the ink and the jet wash liquid.

(1) Refilling Interval

Refill the ink in the following cases
a. When the amount left in the ink tank becomes low
• The following message is displayed on the operation panel.
• Printing operation is continued.
• Before the ink runs out, prepare the ink for refilling.

b. When the ink inside the ink tank is run out
• The following message is displayed on the operation panel.
• Printing operation stops.
• Refill with new ink immediately.

NOTE

- When the ink runs out or is close to being empty, the color of the ink that needs refilling will be indicated as follows:
  - K: Black
  - C: Cyan
  - c: Light Cyan (PJ-2216NXE only)
  - M: Magenta
  - m: Light Magenta (PJ-2216NXE only)
  - Y: Yellow

- After the message "InkNearEnd" is displayed on the operation panel, about $6m^2(66.7ft^2)$ (When "Quality" in the setup menu is set to 360×720dpi) of printing is possible, until the ink runs out.

- Even when the "No Ink" is displayed at the control panel, there may be a small amount of ink left in the main tank.

Refill the jet wash liquid when the following occurs.

a. When the jet wash liquid inside the ink tank is run out

- The following message is displayed on the operation panel.
- Printing will continue to be performed.
- Refill the new jet wash liquid immediately.

(2) Types

NOTE

- Use MUTOH recommended ink only for refill of the ink and the jet wash liquid.
  The printer is designed for use with genuine ink cartridges. If you do not use genuine products,
  - Printouts may become faint and the printer will not be able to detect the end of ink.
  - Problems caused by using ink other than the recommended will void the warranty.

- Refer to the following for the types and details of ink and the ink jet wash liquid.
  ☞7.4 Options/Supply list

(3) Refilling procedure

Follow the steps in "3.5 Refilling the ink - jet wash fluid" to refill the ink.

NOTE

If ink is refilled during printing, printing is resumed.
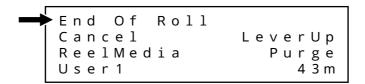
5.2.2 Replacing roll media

Read the following for information on when and how to replace roll media.

(1) Replacement time

Replace roll media under the following conditions.
a. When the roll media loaded in the printer comes to an end
• The following message is displayed on the operation panel.
• If the media comes to an end while printing, the printer stops printing.

b. When you want to change the type of media

(2) Types

___TIP___

For types and details of roll media, refer to the following.
☞ 7.4 Options/Supply list

(3) Replacement procedure (PJ-1614NXE)
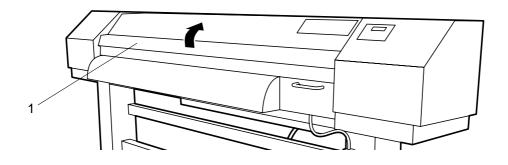
Follow the steps below to replace roll media.

1. If the printer is turned on, make sure of the following
    • Printing or other operations are not performed.
    • Make sure that the display on the operation panel shows the normal state.
    • Make sure that the MEDIA SET lamp is lit (green) on the operation panel.

⚠ **CAUTION**

Be sure not to pinch your fingers while opening and closing the front cover.

2. Open the front cover.
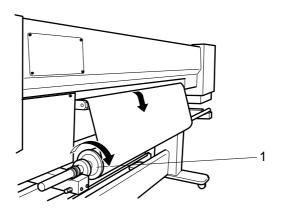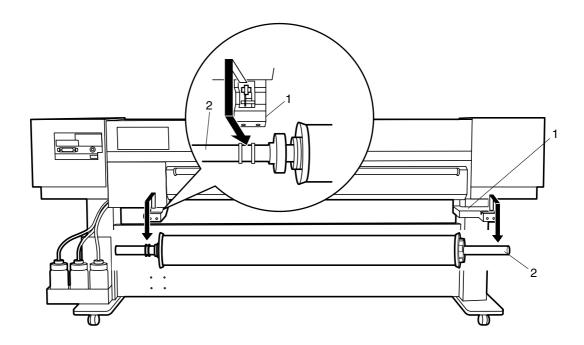
No.	Name
1	Front cover

3. With holding the scroller, wind the roll media manually.
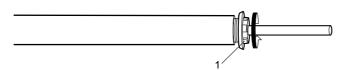
No.	Name
1	Scroller

4. Remove the scroller from the printer and place it on a flat surface.

No.	Name
1	Scroller

5. Loosen the screw of the movable flange.
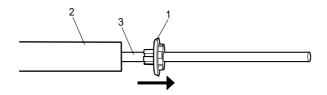
No.	Name
1	Movable flange

6. While holding the roll media, remove the movable flange from the scroller.

NOTE ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━

Do not push the right of the scroller (the side of the movable flange), to avoid damaging it. The right edge of the scroller unit may become damaged by the shock.

━━━

No.	Name
1	Movable flange
2	Roll media
3	Scroller

7. Remove the roll media from the scroller.

No.	Name
1	Scroller
2	Roll media

8. Follow the steps below to install another roll media.

> **TIP**
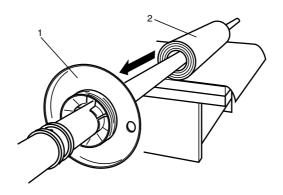
☞3.6 Media handling

(4) Replacement procedure (PJ-2216NXE)
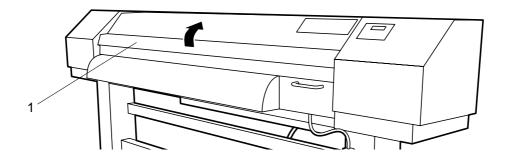
Follow the steps below to replace roll media.

1. If the printer is turned on, make sure of the following
   - Printing or other operations are not performed.
   - Make sure that the display on the operation panel shows the normal state.
   - Make sure that the MEDIA SET lamp is lit (green) on the operation panel.

⚠ **CAUTION**

Be sure not to pinch your fingers while opening and closing the front cover.

2. Open the front cover.
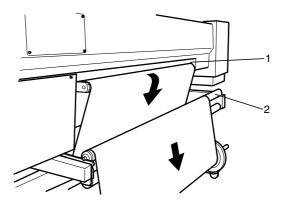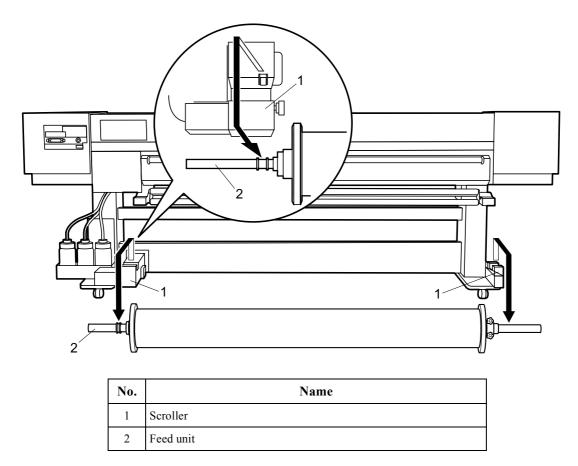
No.	Name
1	Front cover

3. Remove the roll media from the media feed slot and the tension sensor.

No.	Name
1	media feed slot
2	Tension sensor

4. Remove the scroller from the printer and place it on a flat surface.

No.	Name
1	Scroller
2	Feed unit

5. Loosen the screw of the movable flange.

No.	Name
1	Movable flange

6. While holding the roll media ,remove the movable flange from the scroller.

> **NOTE**
>
> Do not push the right of the scroller (the side of the movable flange), to avoid damaging it. The right edge of the scroller unit may become damaged by the shock.

No.	Name
1	Movable flange
2	Roll media
3	Scroller

7. Remove the roll media from the scroller.

No.	Name
1	Scroller
2	Roll media

8. Follow the steps below to install another roll media.

> **TIP**
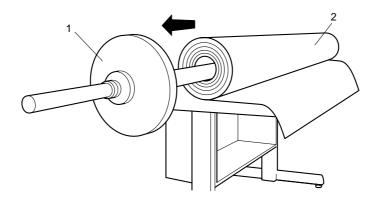
☞3.6 Media handling

5.2.3 Replacement of the ink filter

The replacement interval and procedure of the ink filter is described below.

(1) Replacement interval

Replace the ink filter once a year.

(2) Type

The ink filter that can be used in this product is as follows:
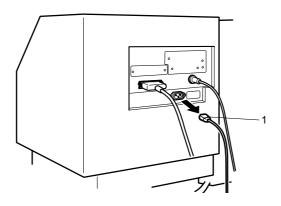
Item name	Model
Ink filter	PJ2-FILTER*2

(3) Replacement procedure

Follow the procedures below to replace the ink filter.
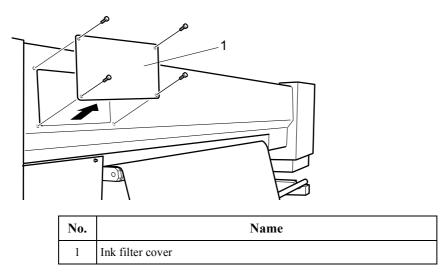
> ⚠ **CAUTION**
>
> - **When changing the ink filter, always perform the following:**
>   - **Turn the unit OFF.**
>   - **Unplug the electrical power cord**
>   - **Remove all cables connected to the unit**
>   **If any of these are connected while replacing the filter, the unit may become damaged.**
>
> - **When changing the ink filter, always wear the glove supplied with the unit on both hands.**
>
> - **Ink and jet wash liquids are poisonous. If skin contact occurs, wash with soap water and rinse well.**

1. Verify that the power of the unit is OFF.

2. Remove the following cables connected to the unit
   - Power cable
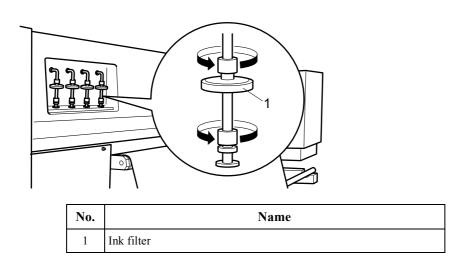
No.	Name
1	Power cable

3. Remove the 4 screws for the ink filter cover on the back of the unit, and remove the ink filter cover.

No.	Name
1	Ink filter cover

4. Loosen the two screws for the ink filter cover, and remove the ink filter to be exchanged.

No.	Name
1	Ink filter

NOTE

- Place used ink filters in a vinyl bag, and dispose according to local ordinances or directions of local governments.

- If the ink spills inside the printer, absorb the ink with the poly-nit wiper supplied with the printer with the jet wash liquid to remove the ink smear.

- Perform installation in the reverse order of the removal instructions.

5.3   Cleaning the printer

You need to clean the printer periodically to keep it in best working condition.

⚠ **WARNING**

- **Do not insert or drop metal or inflammable objects into openings, such as ventilation outlets. Doing so may result in electrical shock and fire.**

- **Stop using your printer if a liquid is spilled into it. This may cause electrical shock or fire. Turn the printer off as soon as possible, unplug the power cable, then contact MUTOH local dealer.**

⚠ **CAUTION**

- **Be sure to turn off the printer and unplug the power cable from the outlet before cleaning the printer.**

- **Do not use thinner, Benzene, alcohol, or other active agents. Doing so may result in damage or paint peeling from the casing.**

- **Be careful not to spill water inside the printer. Doing so may result in a short circuit.**

- **Never open the covers fixed with screws. Doing so may result in electrical shock or a malfunction in the printer.**

The following are instructions for cleaning the printer.
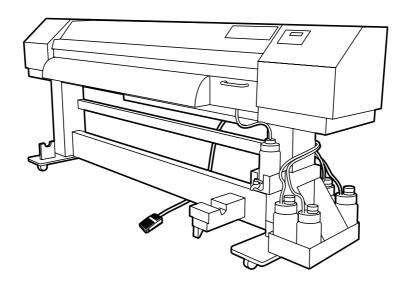
5.3.1 Cleaning the outer case

(1) Cleaning interval

Clean once a month.

(2) Cleaning Procedure

If the outer case is dirty, clean it with a soft, clean cloth.

5.3.2 Cleaning inside the printer

(1) Cleaning interval

Clean once a month.
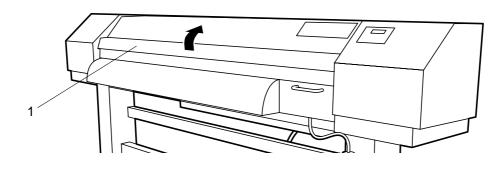
(2) Cleaning Procedure

Follow the steps below.

1. Open the front cover.
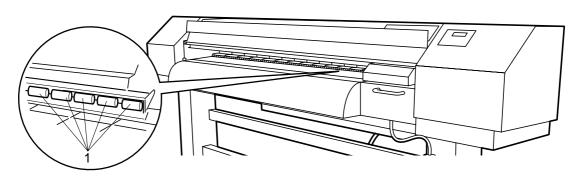
No.	Name
1	Front cover

2. Use a soft brush to carefully clean away any dust or dirt on the pressurizing roller.
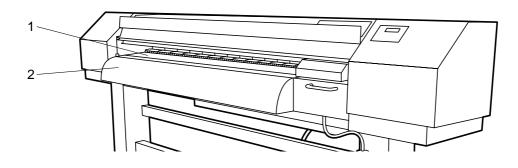
> **NOTE**
>
> Do not blow off media dust inside the printer using an air dusting machine. Doing so may cause noise to occur from inside the printer.

No.	Name
1	Pressurizing roller

3. The platen and the media guide is to be cleaned with a soft damp cloth for any paper dust or ink that has accumulated.
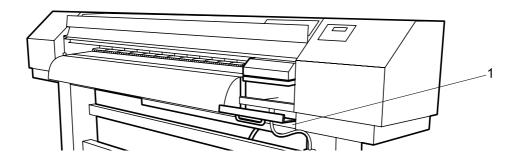
No.	Name
1	Platen
2	media guide

4. Soak the poly-nit wiper provided with the unit, and wipe off ink and other soil from the waste fluid tray.

⚠ CAUTION

- **When cleaning the waste fluid tray, always wear the protective glove supplied with the unit.**

- **The ink and jet wash liquid are poisonous. If skin contact occurs, wash with soap water and rinse well.**

No.	Name
1	Waste fluid tray

5.3.3 Cleaning of the print head surface

(1) Cleaning Interval

Clean every day or after the completion of the operation.

(2) Cleaning Procedure
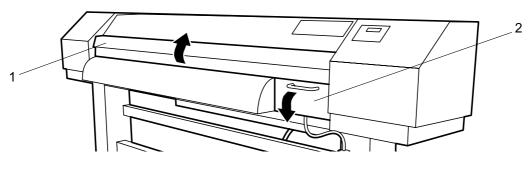
Clean the print head surface according to the following procedure.

⚠ CAUTION

- **When cleaning the print head surface, always wear the protective glove supplied with the unit.**

- **The ink and jet wash liquid are poisonous. If skin contact occurs, wash with soap water and rinse well.**

1. Open the front cover and maintenance cover.

⚠ **CAUTION**

● **When opening and closing the front cover and maintenance cover, be careful not to get fingers caught on the lid.**
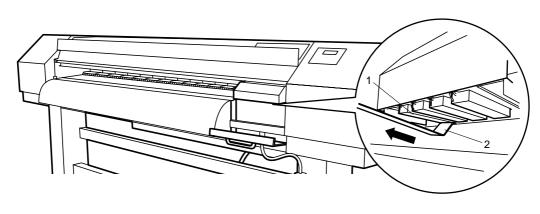
No.	Name
1	Front cover
2	Maintenance cover

2. Using the attached print head wiper, lightly wipe off the ink accumulated on the print head. Wipe from the back of the printer toward yourself.

⚠ **CAUTION**

● **When cleaning the print head, be careful of the following. Incorrect cleaning may result in clogging of the nozzles.**
  ● **Do not touch the print head surface with bare hands.**
  ● **Wipe out ink on the print head wiper every time when ink is adhered to it.**
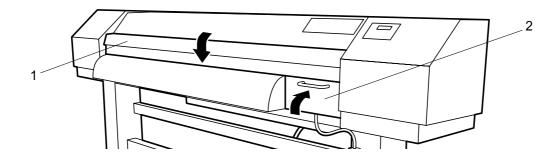
No.	Name
1	Print head

No.	Name
2	Print head wiper

3. Close the front cover and the maintenance cover.
   - Close each cover firmly until they are fixed into place.

No.	Name
1	Front cover
2	Maintenance cover

5.4 Long-term storage cleaning

The period for performing cleaning for long-term storage, and its procedures are described below.

(1) Cleaning Period
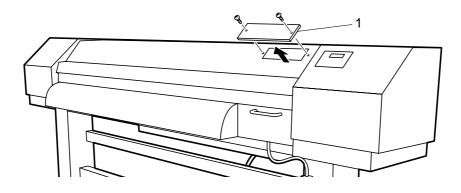
When not using the unit for over 2 weeks, perform cleaning for long term storage.

(2) Operational procedure

Perform cleaning for long-term storage according to the following procedure.

> ⚠ **CAUTION**
>
> ● **When performing cleaning for long-term storage, always wear the protective glove supplied with the unit.**
>
> ● **The ink and jet wash liquid are poisonous. If skin contact occurs, wash with soap water and rinse well.**

1. Remove the screws for the valve cover (2 screws) and remove the valve cover.

No.	Name
1	Valve cover

2. Turn the unit ON.

3. Follow the instructions in "4.4 Menu setup on the operation panel", and bring up the Long Save menu on the control panel.

4. Press the [F1] key - [F4] keys to select the print head to perform the long-term storage cleaning process.

NOTE ██

•   In the Long Save menu, selecting "ALL" is recommended. By selecting "ALL", the long-term storage cleaning treatment is performed for all print heads one by one successively.

•   When "NO" is selected in the Long Save menu, the menu returns to the lower hierarchy without performing the long-term storage cleaning treatment.

██

5. The printer starts the long-term storage cleaning treatment.
    • Ink is discharged from the print head.

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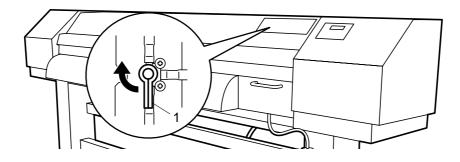
6. When the ink discharge is completed, the following message is displayed on the operation panel.

```



```

NOTE ██

In the [****] part of the message, the color of the 3-way valve to be operated will be displayed.

██

7. Switch the 3-way valve to the jet wash fluid side.
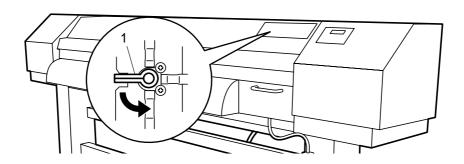
No.	Name
1	3-way valve

8. The printer starts the print head cleaning.
   • The print head is cleaned by the jet wash liquid.

9. When the print head cleaning is completed, the following message is displayed on the operation panel.

10. Switch the 3-way valve to the ink side.

No.	Name
1	3-way valve

11. The printer discharges the remaining jet wash liquid in the print head.

12. When "ALL" is selected in the procedure 4, procedures 5 to 11 are repeated until the long-term storage cleaning treatment is completed for all print heads.

13. When the long-term storage cleaning treatment is completed for all print heads, the operation panel returns to the normal status.

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5-21
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14. Turn the unit power OFF.

15. Reattach the valve cover.

16. The long-term storage cleaning treatment is completed.

NOTE

- If the power is turned ON after the long-term storage cleaning treatment is completed, the printer starts the initial ink filling.

5.5 Transfer and transportation

This section explains transferring and transporting the printer.

5.5.1 Transferring the printer

The following are instructions for transferring the printer.

⚠ CAUTION

- **Keep the printer horizontal during transfer.**

- **Do not tilt the printer, stand it against a wall, or turn it upside down. Doing so may cause ink to leak inside the printer. Also, movement after transport is not covered by the warranty.**
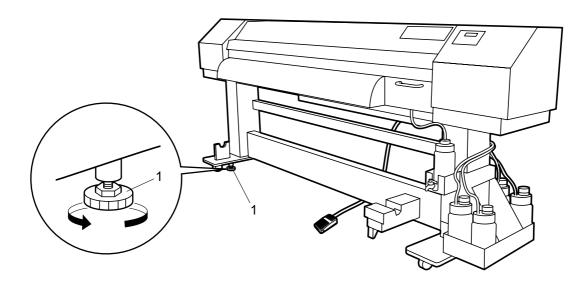
(1) Before the transfer

Follow the steps below to transfer the printer.

1. Make sure that the printer is turned OFF.

2. Dispose of the waste fluid.

3. Remove the 2 scrollers.

4. Disconnect the power cable and all other cables.

5. Turn the 4 adjusters to the directions shown in the diagram to loosen.

6. Transfer the printer.

NOTE

The casters attached to the stand is designed for transferring the printer short distances on a surface in-house.

No.	Name
1	Adjuster

(2) After the transfer

Follow the steps below to prepare the printer to be used after the transfer.

1. Make sure that you place the printer where appropriate.

2. After moving to the installation location, fix the product to the location.

> **TIP**
>
> For more information on where to place the printer, refer to "Installation Manual" .

3. Connect the power cable and other cables.

> **TIP**
>
> For connecting cables, refer to the following.
> ☞3.2 Connecting the power cable
> ☞3.9 Connecting the printer to your PC

4. Perform nozzle checking to check if the printer head has clogged.

TIP

To perform the nozzle check, refer to "3.8.2 NozzleCheck".

5. Perform a fine adjustment of image quality.

TIP

To perform an adjustment of image quality, refer to "3.8.3 Alignment".

5.5.2 Transporting the printer

When you transport the printer, the printer should be repackaged using the original box and packing materials, to protect it from vibration or impact.

NOTE

When you transport the printer, contact MUTOH local dealer.

6 TROUBLESHOOTING

<Memo>

6 Troubleshooting

6.1 Introduction

This chapter explains troubles that may occur when using the printer and how to solve them.
If you encounter an error not described in this chapter, refer to "6.3 Error messages" and contact
MUTOH local dealer.

> **NOTE**
>
> To receive our customer support service, present your warranty. If you do not present it, you may be changed for the
> service even if it is within the term of warranty.
> If you have a maintenance service contract, show the agreement or other documents.

6.2 Failures and malfunctions of the printer

This section describes the failures and malfunctions of the printer not displayed as errors, and their
causes and solutions.

(1) The printer does not work after the power is turned on.

No.	Possible cause	Solutions	References
1	You did not plug the power cable in.	Plug in the power cable.	☞3.2 Connecting the power cable
2	The AC power does not match the specified voltage.	Use the printer at the specified voltage.	☞3.2 Connecting the power cable
3	Is the front cover open?	Close the front cover.	☞3.6 Media handling
4	Is the maintenance cover open?	Close the maintenance cover.	☞3.4 Turning the power ON/OFF

(2) The printer does not work after the media is loaded.

No.	Possible cause	Solutions	References
1	Close the maintenance cover.	Close the front cover.	☞3.6 Media handling
2	Is the pressure roller raised?	Lower the pressure roller.	☞3.6 Media handling
3	Is the maintenance cover open?	Close the maintenance cover.	☞3.4 Turning the power ON/OFF

No.	Possible cause	Solutions	References
4	You did not load the media straight into the printer.	Load the media straight into the printer.	☞3.6 Media handling
5	Are all tanks filled with ink?	Fill all ink tanks with ink.	☞3.5 Refilling the ink - jet wash fluid
6	Is the recommended media being used?	Use a recommended media.	☞4.3.1 Media type
7	You used the printer in direct sunlight or other locations not appropriate for the specified environment.	Use the printer in the specified environment.	☞7.2 Product Specifications

(3) The printer does not work after data is sent from a computer.

No.	Possible cause	Solutions	References
1	You did not connect the interface cable.	Refer to "Connecting the interface cable".	☞3.9.3 Connecting the interface cable
2	Are all tanks filled with ink?	Fill all ink tanks with ink.	☞3.5 Refilling the ink - jet wash fluid

(4) The printer does not print and an error is generated after data is sent from a computer.

No.	Possible cause	Solutions	References
1	Do the computer and the printer setting match?	Insure that the computer and printer setting match.	☞3.9 Connecting the printer to your PC
2	The interface setting or command mode on a computer and the printer do not match.		

(5) Printouts are partially blurred or missing.

NOTE ━━━━━━━━━━━━━━━━━━━━━

When using a media other than those recommended, a proper printing quality may not be gained.

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No.	Possible cause	Solutions	References
1	The media is damp.	Replace with new media.	☞5.2.2 Replacing roll media
2	You used folded, creased, or curled media.		

(6) printing position is not correct (some position is not printed.)

No.	Possible cause	Solutions	References
1	The loading position of the media is not correct.	Load the media correctly.	☞3.6.2 Loading roll media (PJ-1614NXE) ☞3.6.4 Loading roll media (PJ-2216NXE)
2	Is the mirror set?	Disable the setting for the mirror, or make the setting again.	☞4.4 Menu setup on the operation panel
3	You set the origin or starting position.	Turn off the origin or starting position setting, or make the setting again.	☞4.4 Menu setup on the operation panel

(7) media jams occur frequently.

NOTE ▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬

A proper media feed cannot be guaranteed for media that are not in the recommendation.

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No.	Possible cause	Solutions	References
1	Is the recommended media being used?	Use a recommended media.	☞4.3.1 Media type
2	You used the printer in an environment other than that specified.	Use the printer in the specified environment.	☞4.3.2 Cautions on handling media
3	You used old media.	Replace with new media.	☞5.2.2 Replacing roll media
4	You used folded, creased, or curled media.		

(8) Roll media cannot be cut correctly.

No.	Possible cause	Solutions	References
1	The edge of the cutting blade is not sharp.	Replace the cutting blade.	-
2	The roll media has static electricity.	Remove the static electricity on the roll media.	-

(9) You cannot perform initial ink charging.

No.	Possible cause	Solutions	References
1	Is the front cover open?	Close the front cover.	☞3.6 Media handling
2	Is the pressure roller raised?	Lower the pressure roller.	☞3.6 Media handling
3	Is the maintenance cover open?	Close the maintenance cover.	☞3.4 Turning the power ON/OFF

No.	Possible cause	Solutions	References
4	Are all tanks filled with ink?	Fill all ink tanks with ink.	☞3.5 Refilling the ink - jet wash fluid

(10) Ink is not used though you performed initial ink charge.

No.	Possible cause	Solutions	References
1	Is the ink frozen from the cold?	Leave in room temperature for at least 3 hours, and perform head-cleaning a few times.	☞4.5.4 Head cleaning
2	You turned off the printer during the initial ink charging.	Turn on the printer to continue the initial ink charging.	☞3.5 Refilling the ink - jet wash fluid
3	The printer rarely prints correctly just after initial ink charging.	Perform head cleaning a few times, and check after each cleaning.	☞4.5.4 Head cleaning

(11) The media is off or damaged when loading it.

NOTE

Remove the jammed or damaged media, referring to "6.4 When media jams occur".

No.	Possible cause	Solutions	References
1	Is the recommended media being used?	Use a recommended media.	☞4.3.1 Media type
2	The loading position of the media is not correct.	Load the media correctly.	☞3.6.2 Loading roll media (PJ-1614NXE) ☞3.6.4 Loading roll media (PJ-2216NXE)
3	The stroller is not set correctly.	Set the scroller correctly.	☞3.6.1 Attaching roll media (PJ-1614NXE) ☞3.6.3 Attaching roll media (PJ-2216NXE)
4	Foreign material, such as piece of media, is attached to the pressurizing roller.	Clean the pressurizing roller.	☞5.3.2 Cleaning inside the printer
5	You used the printer in direct sunlight or other locations not appropriate for the specified environment.	Use the printer in the specified environment.	☞7.2 Product Specifications
6	You used folded, creased, or curled media.	Replace with new media.	☞4.3.2 Cautions on handling media

(12) Media is damaged during media Initial.

> **NOTE** ▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬
>
> Remove the jammed or damaged media, referring to "6.4 When media jams occur".
>
> ▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬

No.	Possible cause	Solutions	References
1	Is the recommended media being used?	Use a recommended media.	☞4.3.1 Media type
2	The loading position of the media is not correct.	Load the media correctly.	☞3.6.2 Loading roll media (PJ-1614NXE) ☞3.6.4 Loading roll media (PJ-2216NXE)
3	You did not load the media straight into the printer.	Load the media straight into the printer.	☞3.6.2 Loading roll media (PJ-1614NXE) ☞3.6.4 Loading roll media (PJ-2216NXE)
4	Foreign material, such as piece of media, is attached to the pressurizing roller.	Clean the pressurizing roller.	☞5.3.2 Cleaning inside the printer
5	You used the printer where air from an air conditioner blows or other location not appropriate for the specified environment.	Use the printer in the specified environment.	☞7.2 Product Specifications
6	You used media folded, creased, damaged, tore, curled, or inclined to be curled .	Replace the media.	☞4.3.2 Cautions on handling media

(13) Cannot detect the media

No.	Possible cause	Solutions	References
1	Is the recommended media being used?	Use a recommended media.	☞4.3.1 Media type
2	You used the printer in direct sunlight or other locations not appropriate for the specified environment.	Use the printer in the specified environment.	☞7.2 Product Specifications

(14) Media size is wrong during media Initial.

No.	Possible cause	Solutions	References
1	Is the recommended media being used?	Use a recommended media.	☞4.3.1 Media type
2	You did not load the media straight into the printer.	Load the media straight into the printer.	☞3.6 Media handling
3	The curled surface of media is up when loading.	Remove the curl in the media, or replace with new media.	☞3.6 Media handling

No.	Possible cause	Solutions	References
4	You used the printer where air from an air conditioner blows or other location not appropriate for the specified environment	Use the printer in the specified environment.	☞7.2 Product Specifications
5	You reused printed media.	Use new, not printed media.	☞4.3.1 Media type

(15) Media is fed crooked while printing.

No.	Possible cause	Solutions	References
1	Is the recommended media being used?	Use a recommended media.	☞4.3.1 Media type
2	The loading position of the media is not correct.	Load the media correctly.	☞3.6.2 Loading roll media (PJ-1614NXE) ☞3.6.4 Loading roll media (PJ-2216NXE)
3	The stroller is not set correctly.	Set the stroller correctly.	☞3.6.1 Attaching roll media (PJ-1614NXE) ☞3.6.3 Attaching roll media (PJ-2216NXE)

(16) The printer is not connected to a computer using the Centronics interface.

No.	Possible cause	Solutions	References
1	You did not connect the Centronics interface cable correctly.	Connect the Centronics interface cable correctly.	☞3.9.3 Connecting the interface cable
2	When sending printing data from the computer, does the data lamp of the control panel light?	If the data lamp does not light, contact the computer manufacturer.	-
3	The Centronics setting on the printer does not match the setting on the computer.	Make the Centronics setting on the printer so that it matches the setting on the computer.	☞3.9.1 System requirements

(17) The printed lines are blurry.

No.	Possible cause	Solutions	References
1	Is the recommended media being used?	Use a recommended media.	☞4.3.1 Media type
2	You used too thick or thin media.	Use a recommended media.	☞4.3.1 Media type
3	The printed surface is not the printable side.	Pay attention to the printable side to load media correctly.	☞3.6 Media handling
4	Did you try cleaning the head?	• Perform head cleaning. • Perform cleaning on the "Strong" setting. • Clean the print head surface. • Perform cleaning for long-term storage.	☞4.5.4 Head cleaning ☞5.3.3 Cleaning of the print head surface ☞5.4 Long-term storage cleaning

(18) White or black lines appear on printouts.

No.	Possible cause	Solutions	References
1	Is the recommended media being used?	Use a recommended media.	☞4.3.1 Media type
2	The stroller is not set correctly.	Set the scroller correctly	☞3.6.1 Attaching roll media (PJ-1614NXE) ☞3.6.3 Attaching roll media (PJ-2216NXE)

(19) Lines are missing on printouts.

No.	Possible cause	Solutions	References
1	Was the ink that was used for refill within its date of expiration?	Use new ink	☞5.2.1 Refilling the ink and jet wash liquid
2	Is the recommended media being used?	Use a recommended media.	☞4.3.1 Media type
3	Did you try minor adjustments for image quality ?	Try minor adjustments for image quality.	☞3.8.3 Alignment

6.3 Error messages

This chapter explains the messages displayed on the operation panel both when the printer works normally and when an error occurs, and the solutions for the errors.

6.3.1 Status messages

The following are the status messages while the printer works normally.

(1) Displays the operational status (1)

The following operational status is displayed on the first line on the operation panel.

No.	Display	Solutions	References
1	Ready to plot	Waiting for the next operation. (The media is loaded.)	-
2	Paper End	The printer is waiting for the next operation. (No media is loaded into the printer.)	☞3.6 Media handling
3	Receiving	The printer is receiving data.	-
4	Converting	The printer is converting data.	-
5	Plotting	The printer is printing.	-
6	Warning WasteInkTank	Replace the waste liquid absorption material in the tank.	☞4.6.2 Disposal of waste fluids
7	Warning InkTube Life	Contact the dealer where you bought the printer or MUTOH's technical support center.	-

(2) Displays of the operational status (2)

The following operational status is displayed between the first and the third line on the operation panel.

No.	Display	Solutions	References
1	Ink Refil Wait for a while	The printer performs ink charging. Wait for a while.	☞3.5 Refilling the ink - jet wash fluid

No.	Display	Solutions	References
2	Purging Wait for a while	The printer performs head cleaning. Wait for a while.	☞3.7 Head cleaning before printing
3	Paper Initial ********	The printer performs initial setting of media. Wait for a while. ******** indicates the media type setting made.	☞3.6.6 Setting media type
4	Warming up Wait for a while	The platen heater /ink dryer is warming up. Please wait.	-
5	During discharge Wait for a while	The ink is being discharged for the cleaning process of the long-term storage. Please wait.	☞5.4 Long-term storage cleaning
6	During washing Wait for a while	The print head is being cleaned for the cleaning process of the long-term storage. Please wait.	☞5.4 Long-term storage cleaning
7	*Capping Out* Detach a Cap Cover and push ENTER	The print head cap is attached. Remove the print head cap, and press the [ENTER] key.	☞5.4 Long-term storage cleaning ☞3.4 Turning the power ON/OFF
8	*Manual Cut Paper* Cut paper and push ENTER	Cut the roll media, and press the [ENTER] key of the control panel.	☞4.6.1 Roll media cutting procedure
9	*Roller Turn* Take up Roll -OFF- can not operate	The take-up mechanism is set to "OFF". Set to "ON" on the take-up mechanism menu.	☞4.4 Menu setup on the operation panel

6.3.2 Message type error display and solutions

The following are the message type error display and their solutions.
The following message type error display are displayed when an error occurs while operating the printer.
When one of the following message type error display appear, the printer may stop operation.
If the printer stops operation, solve the problem to delete the error message and restart the printer.

(1) Error messages regarding media feeding

The following error message is displayed on the first line on the operation panel.
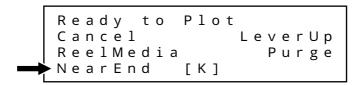
No.	Display	Descriptions	Solutions	References
1	Undefined paper	The printer failed to detect the media. (The printer stops.)	Reload the media.	☞3.6 Media handling

No.	Display	Descriptions	Solutions	References
2	Paper Slant	The media was fed at an angle into the printer. (The printer stops.)	Reload the media.	☞3.6 Media handling
3	End Of Roll	Roll media runs out. (The printer stops.)	Load new roll media.	☞5.2.2 Replacing roll media
4	Cover Open	The front cover is open. (The printer stops.)	Close the front cover.	-
5	Please Set Paper	The pressure roller is raised. There is no media.	Set the media, and lower the pressure roller.	-
6	Paper JAM Error	The media has jammed. (The printer stops.)	Remove the jammed media, and reset a media.	☞4.4 Menu setup on the operation panel

(2) Error messages regarding warnings of the remaining ink

The following error message is displayed on the forth line on the operation panel.

No.	Display	Descriptions	Solutions	References
1	Near End [*]	Ink cartridge(s) is (are) near empty. (The printer does not stop.)	Prepare new ink cartridge(s).	☞5.2.1 Refilling the ink and jet wash liquid

> **TIP**
>
> - The [*] of the error will display shows the color of the ink causing the error according to the following codes:
>   - K: Black
>   - C: Cyan
>   - c: Light Cyan (PJ-2216NXE only)
>   - M: Magenta
>   - m: Light Magenta (PJ-2216NXE only)
>   - Y: Yellow

(3) Other error messages

The following error message is displayed on the forth line on the operation panel.

No.	Display	Descriptions	Solutions	References
1	Ink Status No Ink [*]	Ink cartridge(s) is (are) empty. (The printer stops.)	Replace the ink cartridge(s)	☞5.2.1 Refilling the ink and jet wash liquid
2	Ink Status No Filled [*]	Initial filling has not been performed.	Perform initial filling of the ink.	☞3.5 Refilling the ink - jet wash fluid
3	Memory Status NoMemory DIMM 64 MB	Short of memory while converting or printing data.	Consider increasing the memory capacity.	-

> **TIP**
>
> - The [*] of the error will display shows the color of the ink causing the error according to the following codes:
>   - K: Black
>   - M: Magenta
>   - C: Cyan
>   - m: Light Magenta (PJ-2216NXE only)
>   - c: Light Cyan (PJ-2216NXE only)
>   - Y: Yellow

6.3.3 Data error display and solutions

Following are data error displays and their solutions during printer operations.
Data error display are displayed when a communication error occurs between a computer and the printer.
If data error display occurs, the following error messages are displayed and the printer stops.
Solve the problem to delete the error message and restart the printer.

No.	Message	Descriptions	Solutions	References
1	Online Status I**** Err [ ]	An error has occurred while receiving data.	Confirm the communication condition between the computer and the printer.	☞4.4 Menu setup on the operation panel

> **NOTE**
>
> *** in error messages are code number indicating what kind of error occurred.

6.3.4 Command error display and solutions

Following are command error descriptions and their solutions during the printer operations.
Command errors are displayed when an error has occurred while converting the command data sent from a computer to the printer.
If a command error occurs, the following error messages are displayed and the printer stops.
Solve the problem to delete the error message and restart the printer.

No.	Message	Description	Solutions	References
1	Command Status MH**** Err [ ]	Invalid command data is sent from a computer.	Make sure that the settings of the computer and the printer match.	☞4.4 Menu setup on the operation panel

NOTE

- *** in error messages are code numbers indicating what kind of error occurred.
- [ ] may indicate the command code of the error.
- For the settings on a computer, refer to the computer's operation manual.

6.3.5 Error requiring a restart

Following are descriptions and their solutions of error requiring a restart.
Error requiring a restart are displayed when the following fatal error has occurred during printer operation.
• Foreign material disturbing the printer operation is involved in the printer.
• An electrical circuit (such as board, motor, or sensor) failure has occurred.
• An error on control program of the printer has occurred.
If error requiring a restart has occurred, the printer works as shown below then stops.
(1) Power relating to the driving system is shut off automatically.
(2) All indicator lights on the operation panel are turned on and beeps sound continuously.
(3) An error message is displayed on the operation panel.
Press any key on the operation panel to stop the beep sounds.
If error requiring a restart has occurred, solve the problems to restart the printer and delete the error.
If the same error message is displayed again, contact MUTOH local dealer. Be sure to inquire by the code numbers of the error messages.

```
                                          6-13
```

No.	Message	Descriptions	Solutions	References
1	System Err	An error which cannot be solved promptly has occurred.	1. If foreign material such as a piece of media or media dust are involved in the driving system, remove them. 2. Make sure that the replaced parts are installed correctly. 3. Turn OFF the printer. After 10 seconds or more have passed, turn it back ON.	☞6.4 When media jams occur ☞5.2 Replacing consumables

NOTE

- *** in error messages are code numbers indicating what kind of error occurred.

- [ ] may indicate the command code of the error.

- For the settings on a computer, refer to the computer's operation manual.

6.4 When media jams occur

If the loaded media is jammed in the printer, follow the steps below to remove the jammed media.

6.4.1 How to remove the media (PJ-1614NXE)
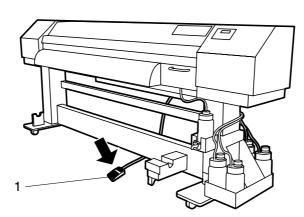
⚠ **CAUTION**

Be sure not to pinch your fingers when you open or close the front cover.

1. Press [F2] key to raise the pressurizing roller.

   - The MEDIA SET lamp goes off.
   - The following message is displayed on the operation panel.

NOTE

- When raising or lowering the pressurizing roller, you can use the foot switch instead of the control panel.
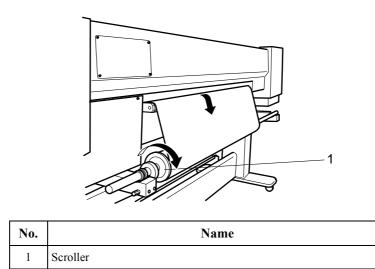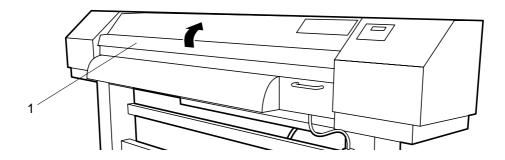
No	Name
1	Foot switch

2. With holding the scroller, wind the roll media manually.

No.	Name
1	Scroller

3. If a piece of media or media dust are in the printer, open the front cover and remove the media or media dust.

4. If an error requiring a restart has occurred, turn off the power of the product once, and turn it on again.

6.4.2 How to remove the media (PJ-2216NXE)
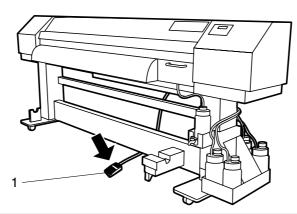
⚠ **CAUTION**

Be sure not to pinch your fingers when you open or close the front cover.

1. Press [F2] key to raise the pressurizing roller.

   - The MEDIA SET lamp goes off.
   - The following message is displayed on the operation panel.

NOTE

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- When raising or lowering the pressurizing roller, you can use the foot switch instead of the control panel.
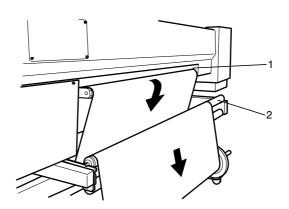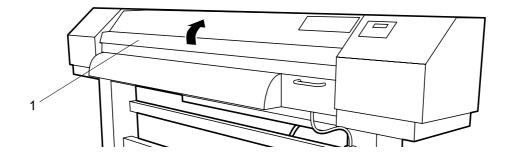
No	Name
1	Foot switch

━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━

2. Remove the roll media from the media feed slot and the tension sensor.

No.	Name
1	Media feed slot
2	Tension sensor

3. If a piece of media or media dust are in the printer, open the front cover and remove the media or media dust.

4. If a reboot requiring error occurs, turn off the printer using the [POWER] key on the operation panel, and turn it back on.

7 APPENDIX

\<Memo\>

_____
\<Memo\>

7 Appendix

7.1 Introduction

This section explains the specifications, optional parts and supplies, installation procedures for optional parts, and user support for this printer.

7.2 Product Specifications

7.2.1 PJ-1614NXE Unit specifications

Item		Specifications
Model name		PJ-1614NXE
Printing method		Piezo inkjet
Drive method		Firmware servo/DC motor drive
Media feed method		Multi-point pressure grid roller method
Media fixing method		Pressurizing roller auto-down method
Media supply and discharge		Back feeding/front paper discharge
Roll paper specifications		External: 150mm(5.9in.) or less, weight 50kg(110Lbs.) or less.
Max. media width		1626mm(64.0in.)
Max. print width		1600mm(63.0in.)
printing margins		Front: 100mm, Back: 0-50mm, Left: 12.7mm, Right: 12.7mm
Media cut method		Manual cut
Head height adjustment		Three levels: Low/Normal/High
CPU		64Bit RISC CPU,
Memory		64MB
Commands		MH-RTL (RTL-PASS)
Interface		• Standard: bi-directional centronic method (IEEE1284 compliant; compatible, nibble, ECP mode) • Optional: Network Interface
Ink	Supply method	Pump supply method from individual color tanks to a sub-tank. Supply from the tank to print head through ink weight using vacuum control.
	Ink Color	Maximum 4 colors (black, cyan, magenta, yellow)
	Tank Capacity	2000ml(0.52Gal.) for each color
Head life expectancy		10 billion dots or more per nozzle(in case of the sequence discharging under the condition of the temperature 25°C(77F) with no dust)

Item		Specifications
Environmental conditions	Operation environment	Temperature: 18°C(64.4F) to 32°C(89.6F), Humidity 30%-70%, without condensation
	Storage environment	Temperature: -10°C(14F) to 60°C(140F), Humidity 30%-70%, without condensation (with ink empty)
Power source	Voltage	AC100V-120V+/-10% / AC220V-240V +/-10% Automatic Switching
	Frequency	50Hz / 60Hz±1Hz
Power consumption	When Printing	1100VA or less (when the heater is on)
	When in standby	200VA or less
Outer diameter dimensions	Height	1227mm(48.3in.)
	Width	3018mm(118.8in.)
	Depth	720mm(28.3in.)
Mass		228kg(50.3Lbs.)

7.2.2 PJ-2216NXE Unit specifications

Item		Specifications
Model name		PJ-2216NXE
Printing method		Piezo inkjet
Drive method		Firmware servo/DC motor drive
Media feed method		Multi-point pressure grid roller method
Media fixing method		Pressurizing roller auto-down method
Media supply and discharge		Back feeding/front paper discharge
Feed unit		Automatic/Manual
Roll paper specifications		External: 250mm(10.0in.) or less, weight 100kg(220Lbs.) or less.
Max. media width		2210mm(87.0in.)
Max. print width		2159mm(85.0in.)
printing margins		Front: 100mm, Back: 0-50mm, Left: 25.4mm, Right: 25.4mm
Media cut method		Manual cut
Head height adjustment		Three levels: Low/Normal/High
CPU		64Bit RISC CPU,
Memory		128MB
Commands		MH-RTL (RTL-PASS)
Interface		• Standard: bi-directional centronic method (IEEE1284 compliant; compatible, nibble, ECP mode) • Optional: Network Interface
Ink	Supply method	Pump supply method from individual color tanks to a sub-tank. Supply from the tank to print head through ink weight using vacuum control
	Ink Color	Maximum 6 colors (black, cyan, magenta, yellow, light cyan, light magenta)
	Tank Capacity	2000ml(0.52Gal.) for each color

Item		Specifications
Head life		10 billion dots or more per nozzle(in case of the sequence discharging under the condition of the temperature 25°C(77F) with no dust)
Environmental conditions	Operation environment	Temperature: 18°C(64.4F) to 32°C(89.6F), Humidity 30%-70%, without condensation
	Storage environment	Temperature: -10°C(14F) to 60°C(140F), Humidity 20%-80%, with no condensation (with ink empty)
Power source	Voltage	AC100V-120V+/-10% / AC220V-240V +/-10% Automatic Switching
	Frequency	50Hz/60Hz +/-1Hz Automatic switching
Power consumption	When Printing	1400VA or less (when the heater is on)
	When in standby	200VA or less
Outer diameter dimensions	Height	1227mm(48.3in.)
	Width	3586mm(141.2in.)
	Depth	720mm(28.3in.)
mass		294kg(648Lbs.)

7.3 Interface Specifications

This section explains the specifications for the interfaces supported by this product.

7.3.1 Centronics Bidirection Parallel Interface:IEEE1284) Specifications

(1) Interface Specifications

Item	Specifications
Transmission modes	Compatible , Nibble , ECP Mode
Data length	8 bits
Transmission direction	Unidirectional (receiving only), Bidirectional
Connector pin number	

(2) Table of parallel interface pin numbers and signals

Pin number	Connection signal	Signal direction	Pin number	Connection signal	Signal direction
1	STROBE	To printer←	19	SG	
2	DATA1	To and from printer←→	20	SG	
3	DATA2	To and from printer←→	21	SG	
4	DATA3	To and from printer←→	22	SG	
5	DATA4	To and from printer←→	23	SG	
6	DATA5	To and from printer←→	24	SG	
7	DATA6	To and from printer←→	25	SG	
8	DATA7	To and from printer←→	26	SG	
9	DATA8	To and from printer←→	27	SG	
10	ACK	From printer→	28	SG	
11	BUSY	From printer→	29	SG	

Pin number	Connection signal	Signal direction	Pin number	Connection signal	Signal direction
12	P ERROR	From printer→	30	SG	
13	SELECTED	From printer→	31	INIT	To printer←
14	AUTOFD	To printer←	32	FAULT	From printer→
15	Not connected		33	Not connected	
16	SG		34	Not connected	
17	FG		35	Not connected	
18	+5V		36	SELECTIN	To printer←

(3) Recommended centronics cable specifications

Item	Specifications
Interface	Dual-direction Parallel Interface:IEEE1284
Structure	AWG28×18 (twisted pair wiring)
Shield construction	Metallic tape+weaving(double shielded cable)
Characteristic impedance	62Ω

7.3.2 Network Interface (Optional) Specifications

Item	Specifications		
NetWork Type	Ethernet IEEE802.3		
NetWork I/F	10 Base-T,100 Base-TX(automatic switching) (RJ-45 connector,twisted pair cable,category 5)		
Protocol	TCP/IP	NetWare(V3.1)	EtherTalk
Mode	• ftp • lpr • socket	• remote printer mode • print server	• printer name • zone name
Functions	• Automatic protocol recognition • Transmission speed up to 330 KB/s (differs according to networking environment) • IP address and other settings are enabled by the accessory utility software (Printset) and general browser software		

7.4   Options/Supply list

7.4.1 Options

(1) Interface cable

Name	Model	Sales units
Centronics cable (3.6m/11.8ft)	PCT36	1 box (includes one set)

(2) Network interface

Name	Model	Sales units
Network interface board	RJ-ETH13TXEN	1 box (includes one set)

(3) Hard Disk

Name	Model	Sales units
Hard disk (20GB)	RJ2-HDD-ASSY	1 box (includes one set)

(4) Scroller

Name	Model	Sales units
Scroller 64inches (for PJ-1614NXE)	PJ2-SR64	1 box (includes one set)
Scroller 87inches (for PJ-2216NXE)	PJ2-SR87	1 box (includes one set)

7.4.2 Supply

(1) Supply Ink

Name	Model	Sales units
Supply ink K (Black)	PJ2-SOINK-BK	1 bottle (3.2L/ 1.0Gal.)
Supply ink C (Cyan)	PJ2-SOINK-CY	1 bottle (3.2L/ 1.0Gal.)
Supply ink M (Magenta)	PJ2-SOINK-MA	1 bottle (3.2L/ 1.0Gal.)
Supply ink Y (Yellow)	PJ2-SOINK-YE	1 bottle (3.2L/ 1.0Gal.)

Name	Model	Sales units
Supply ink Lc (Light Cyan)	PJ2-SOINK-LC	1 bottle (3.2L/ 1.0Gal.)
Supply ink Lm (Light Magenta)	PJ2-SOINK-LM	1 bottle (3.2L/ 1.0Gal.)
Jet wash fluid	PJ2-SOJW*5	1 bottle (5L/1.5Gal.)

(2) Roll media

> **NOTE**
>
> For more information about the recommended media, contact MUTOH local leader.

(3) Other supply items

Name	Model	Sales units
Ink filter	PJ2-FILTER*2	1 box (2 filters per box)
Polynit wiper	PJ-POLYNITW	1box (300 sheets per box)

7.5 Installing Options

When installing optional parts purchased with your printer, refer to the procedures below.

> ### ⚠ CAUTION
>
> - **Before installation of options, always perform the following.**
>   - **Turn the power source to the product off.**
>   - **Remove the power source plug from the outlet.**
>   - **Remove all cables connected to the printer.**
>   **Failure to do so could result in damage to the printer or your computer.**
>   - **Touch a metallic section of the product, to remove any static electricity in your body. The electronic components can be damaged from static electricity.**
>
> - **When installing options, do not touch the elements on the circuit board. The elements on the boards can be very hot, and can cause burns.**

7.5.1 Installation of the hard disk
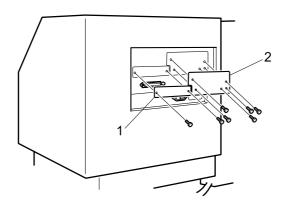
Installing a hard disk in this unit will allow to process large data effectively.

Name	Model
Hard disk	PJ2-HDD-ASSY

Install the hard disk to the unit according to the following procedure.

> ### NOTE
>
> - The hard disk is equipped with PJ-2216NXE as standard.
>
> - When replacing the hard disk, use the reverse procedures of installing to uninstall.

1. Remove the hard disk slot on the back face of the unit.
    - Interface slot cover
    - Hard disk slot cover
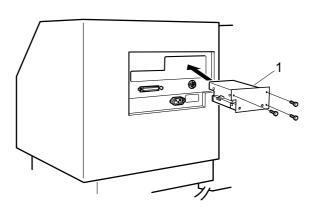
No.	Name
1	Interface slot cover
2	Hard disk slot cover

2. Insert the hard disk into the hard disk expansion slot of the board.
   - Match the cut out section of the hard disk to the slot.

NOTE

The hard disk slot has a feature to prevent improper insertions. If the hard disk does not go in, do not try to force it in. This can damage the hard disk.

No.	Name
1	Hard disk

3. Re-attach the following covers.
   - Interface slot cover

4. Connect the disconnected cables.

TIP

Refer to "3.2 Connecting the power cable" for details on how to install the power source cable.
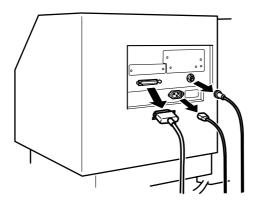
7.5.2 Installing network interface board

Installing a network interface board in this unit will allow usage of the unit over a network environment.

Name	Model
Network interface board	RJ-ETH13TXEN
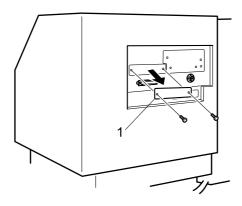
Install the network interface board to the unit according to the following procedure.

1. Make sure that the product power is OFF.

2. Disconnect the following cables attached to the printer.
    - Power Cable
    - Interface Cable
    - Foot Switch Cable

No.	Name
1	Power cable
2	Interface cable
3	Foot switch cable

3. Remove the network interface slot cover on the back face of the unit.
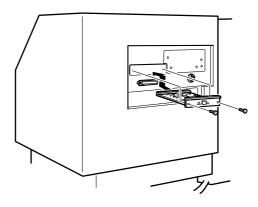
No.	Name
1	Network interface slot cover

4. Insert the network interface board into the network interface expansion slot of the board.
    • Match the cut out of the section of the network interface to the slot.

NOTE ▬▬

The network interface slot has a feature to prevent improper insertions. If the network interface board does not go in, do not try to force the memory in. This can damage the interface board.

▬▬▬

No.	Name
1	Network interface board

5. Re-connect the disconnected cables

TIP ▬▬

For the installation method of the power cable, see "3.2 Connecting the power cable".

▬▬▬

7.6　Glossary

This manual includes words that are used with meanings that are different from their normal usage, as well as some special terminology specific to printers.
These words are defined below.

A

Application software	Software for performing business functions on computer. Includes word processing software, spreadsheet software, and image processing software.

B

Bit	Abbreviation for "binary digit", the unit for data used by computers and printers. Indicated with 2 numbers, 0 and 1.

C

Carriage	Part that moves the print head and cutting blade left to right
CPU	Abbreviation for central processing unit

D

Double click	Quickly pressing the mouse button 2 times
dpi	Unit of resolution. Indicates the dots per inch that can be printed in a width of 25.4mm (1 inch)

E

H

Head cleaning	Cleaning of the print head surface and removing the remaining ink in the nozzle.
Help file	File that explains software operation methods. Displayed by clicking "Help" on the printer settings screen. Also called online help.

I

Initial media movement	Movement after media is loaded, until the printer is ready to print
Ink replenishment	Loading ink to the tip of the print head nozzle to prepare for printing

Initial values	Values set when the printer leaves the factory
Initialization routine	Operation from when the printer power source is turned on until it is ready to print
Ink jet printer	Printer that ejects ink from the nozzle on the head onto the media.
Install	The process of copying data and software from a floppy disk or CD-ROM onto the hard disk of a computer, and setting it up for use.
Interface	Connection point where different devices are connected on a computer. Or, connection specifications for hardware and software to exchange data between such devices.
Interface cable	Cable connecting the printer and the computer
Inch	Unit of length. 1 inch equals 25.4mm.

J

JIS	Abbreviation for Japan Industrial Standard

L

Local printer	Printer connected directly to a computer via an interface cable

O

Operating system	Basic software that manages the computer system. Abbreviated as OS.
Optional	In this manual, refers to accessories related to the printer that are sold separately.
Online help	Help files
Origin	

M

Media loading position	Position for aligning the media when loading it into the printer
Media feed direction	Direction in which media is fed while printing
media drift	When the media does not adhere to the printing board
media jam	When media jams while printing
MH-RTL	Luster data printer command, developed by MUTOH Industries Ltd.

N

Network Printer	Printer connected to the computer via a network

P

Plug and play	Function that allows the immediate use of a peripheral device, such as a printer, as soon as automatic operation environment settings are made, simply by connecting the device to your computer. Included with Windows95/98.
Print head	Part that prints by spraying ink onto media. Located in a position where it can not be seen without removing the cover.
Printer command	Language used to operate the printer
Parallel interface	Forwarding-type interface that forwards data 8 bits at a time
Purge	To discharge the ink at a certain amount from the print head in order to remove the ink or smear clogged in the nozzle.
Printing margin	Spaces on media where printing is not possible
Printing region	Regions on the media where printing is ensured, without content loss. Printing data that falls outside of these regions may not be printed.
Pressurizing roller	Structure that presses media loaded into the printer to hold it into place

R

Roll media	Long media that is cut to a standard size and width, and rolled onto a tube
RAM	Abbreviation for random access memory, for reading and writing data
RIP	Abbreviation for Raster Image Processor. The device used to convert data that is described in page description language such as Postscript into bit map data.
Resolution	Index for indicating the detail of quality. Generally expressed in units of dpi. Quality improves with greater resolution, but data size and printing time increase.

S

Scroller	Tool for installing and feeding roll media
Supply	In this manual, refers to the consumable accessories for this printer

U

User's media

Index

Onsite adjustment verification

☐ PJ-1614NXE / ☐ PJ-2216NXE

Date _____
Product Number _____

Item	Contents	Check
Package opening	☐ Check the contents of the package	
	☐ Remove the packing materials	
Installation	☐ Placing the main unit horizontally	
	☐ Insure that there is no scratch or scar on the surface of the printer.	
	☐ Insure that Y-bare cable is not out of position when the product is tilted to carry in.	
	☐ Insure that head caps are removed.	
	☐ Insure that the 3-direction cocks are downward. (PJ-1614NXE: 4 locations, PJ-2216NXE: 6 locations)	
	☐ Interface connection (☐Centronics ☐Network)	
	☐ PC ambient (Host name:) (CPU clock frequency: Hz) (Loaded memory capacity: MB) (Available hard disk space: MB)	
	☐ Application software that is mainly used. (☐ Illustrator _____ ☐Photoshop _____ ☐Others _____)	
User environment	☐ Insure that the ventilation facility is proper.	
	☐ Insure that there is no excessive dust.	
	☐ Operational temperature ℃ Operational humidity % (recommended environment: 18℃ - 32℃ / 30% - 70%)	
	☐ Insure that no direct air from the air conditioner or direct sunlight on the printer.	
	☐ Mainly used media ☐Terpolin ☐MF ☐FF ☐Cloth ☐Others	
	☐ Size of the most often used media (width mm× m length)	
	☐ Name of maker of the most often used media ( )	
	☐ Used option (☐HDD ☐Network I/F ☐Scroller)	
Performance check	☐ Insure that all inks are charged to the required level and the lids are all properly closed.	
	☐ Check the initializing performance.	
	☐ Check the initial filling performance.	
	☐ Negative pressure setting _____ kPa (Factory setting: -2.1kPa)	
	☐ Media setting	
	☐ Media initial performance	
	☐ Perge (normal mode) succeed at ___times.	
	☐ Nozzle check	
	☐ Heater performance check (Insure that the platen and the heater of the drier is turned on.	
	☐ Print the parameters. (A person who adjusts must keep these parameters as a record.)	
	☐ Test printing (palette printing)	
	☐ Online printing ・ Use the same media and data from the time of the inspection before shipping. ・ Print two printouts. One is collected by a person who adjusts the printer and the other is for the user to keep as a record.	
	☐ Winding unit performance check	
	☐ Feed unit performance check (PJ-2216NXE only)	
Instructions	☐ Panel operation	
	☐ How to store the print head caps when the power is on.	
	☐ Instructions when the power is off.	
	☐ How to use the ink and the jet wash	
	☐ How to load the media and what to do when the media is jammed.	
	☐ Procedures when using the send roll mechanism. (PJ-2216NXE only)	
	☐ Procedures when using the take-up mechanism	
	☐ Head cleaning (purge procedures and important information on cleaning the print head nozzle surface)	
	☐ Important information when other media than MUTOH recommended is used.	
	☐ How to use the platen and the drying heater	
	☐ Explanation of the print head height and each printing mode.	
	☐ Important information when handling the print head	
	☐ Disposal of the waste liquid	
	☐ Procedures of replacing the ink filter	
	☐ Procedures of the long save cleaning (head cleaning)	
	☐ Explanation of optional products	
	☐ Explanation of maintenance (Where to contact etc.)	
Work verification	I certify that the work above is all checked and completed.	

Company name
Section or department name
Name

Signature

Cut-off line

Operation Panel Table

No.	Name	Normal	Setup menu display
1	[POWER] key	Turns the printer on and off.	Turns the printer on and off.
2	[F1] key	Executes the function assigned to F1	Executes the function assigned to F1.
3	[F2] key	Executes the function assigned to F2.	Executes the function assigned to F2.
4	[F3] key	Executes the function assigned to F3.	Executes the function assigned to F3.
5	[F4] key	Executes the function assigned to F4.	Executes the function assigned to F4.
6	[MENU ▲] key	Changes the LCD monitor display to setup menu status.	Changes the menu in reverse order.
7	[MENU ▼] key	Changes the LCD monitor display to setup menu status.	Changes the menu in forward order.
8	[ENTER] key	–	Determines the new parameter value and changes the LCD monitor display to the next menu. Sets the parameter value and changes the LCD monitor display to the next menu.
9	[CANCEL] key	–	Cancels the new parameter value and changes the LCD monitor display to the next menu. Clears the parameter value and changes the LCD monitor display to the next menu.

No.	Name	Color	Status	Function
10	LCD monitor	–	–	This monitor displays the operation status and error messages of the printer.
11	POWER lamp	Red	On	The printer is on.
			Off	The printer is off.
12	ERROR lamp	Red	Flashing	An error has occurred. The contents will be displayed on the LCD monitor.
			Off	Either there is no error in the printer or the power is off.
13	DATA lamp	Green	On	The printer is receiving print data.
			Flashing	The printer is analyzing received data.
			Off	The printer is waiting to receive print data.
14	MEDIA SET lamp	Green	On	・The pressurizing roller is in the release position. ・Media is not set.
			Off	・The pressurizing roller is in the secured position. ・The media is set.

Cut-off line

\<Memo\>

Setup Menu Configuration Diagram

For Setup menu configuration diagram, refer to the followings.

(TIP) ━━━━━━━━━━━━━━━━━━━━━━━━━━━

- For details of the setup items, refer to "4.4 Menu setup on the operation panel panel".

- [F1] to [F4] are the key names which can be operated on each setup item.

- < > in each table shows the parameters set at the factory (initial settings)

━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━

Setup Menu Configuration Diagram (1/2)

```
Setup menu ─── [F1] Origin setting
               [F2] Test print ─────── Test printing ─── [F1] Setup Print
                                                          [F2] Nozzle Check
                                                          [F3] Alignment (UniDir)
                                                          [F4] Alignment (BiDir)
                                       Test printing ─── [F1] Pallet printing
                                                          [F2] Maintenance status
               [F3] Media setting ─── [F1] Types ─── Types ─── [F1] Marking film
                                                                [F2] Cloth
                                                                [F3] Backlight film
                                                                [F4] Turpolin
                                                      Types ─── [F1] User media ─── User media to ─── [F1] Ink DryTime ─── Sec. to   Sec. to   Sec. to   min
                                                                [F2] User media                        [F2] HeadHeight ─── [F1]
                                                                [F3] User media                                            [F2]
                                                                [F4] User media                                            [F3]
                                                      Types ─── [F1] User media                        [F3] Stiff ─── [F1] Soft
                                                                [F2] User media                                       [F2] Normal
                                                                [F3] User media                        [F4] Thickness ───   μ     μ
                                                                [F4] User media                                                μ
                                                                               User media to ─── [F1] Platen heater ─── Off   to     to
                                                                                                  [F2] Dryer ─── Off   to     to
                                    [F2] Media cutting ─── [F1] Off            [F3] Dist.Adj ─── [F1] Print
                                                           [F2] Manual                           [F2] Change ───

Setup menu ─── [F1] Print mode ─── [F1] Print mode ─── Print mode ─── [F1] Quality ─── [F1] ─── Interlace ─── [F1] Off
                                   [F2] Print mode                                     [F2]                    [F2] 2-path
                                   [F3] Print mode                                     [F3]
                                   [F4] Print mode                   [F2] Direction ─── [F1] UniDir
                                                                                        [F2] BiDir
                                                                    [F3] Repeat ─── [F1] Times ─── Once  to 4Times
                                                                                    [F2] Interval ─── 0.0Sec.  to 5.0Sec.
               [F2] Command setting ─── [F1] Image Resolu ─── Image Resolu ─── [F1]
                                                                               [F2]
                                                                               [F3]
                                                                               [F4]
                                                              Image Resolu ─── [F1]
                                                                               [F2]
                                        [F2] Online Timer ─── Off   Sec. to   Sec. to   Sec.
               [F3] Layout setting ─── [F1] Stitch ─── [F1] Off
                                                       [F2] On
                                       [F2] Connecting margin ───       to
               [F4] Function setting ─── [F1] ─── [F1] No
                                                  [F2] Yes
                                         [F2] Mirror ─── [F1] Off
                                                         [F2] On

Setup menu ─── [F1] Roll media setting ─── [F1] Invalid
                                           [F2] Roll media
                                           [F3] Roll media ─── Length of roll media ───
                                           [F4] Roll media
               [F2] Centronics setting ─── [F1] Centronics
                                           [F2] Bi Centro
               [F3] Network setting ───
```

→ Setup Menu Configuration Diagram (2/2)

Setup Menu Configuration Diagram (2/2)

```
▶ Setup Menu Configuration Diagram (1/2)
─ Setup menu ──────────── [F1]Utility Setup menu ─────── [F1]ErrorDisplay ──────── [F1] Off
                                                                                  [F2]On
                                                        [F2]media detect ──────── [F1] Yes
                                                                                  [F2]No ──────────────── Media width   PJ-1614NX ─────────        to              to
                                                                                                          Media width   PJ-2216NX ─────────        to              to
                                                        [F3]Winding Unit ───────── [F1] Off
                                                                                  [F2]On
                                                        [F4]Vacuum pump ──────────                to
                                                                                  to
                          [F2]File management setup menu ─ File management ──────── [F1]Writing ────────── [F1] Off
                                                                                                           [F2]Writing/Printing
                                                                                                           [F3]Printing after writing
                                                                                                           [F4]Writing only
                                                                                  [F2]Re-print ─────────── File name
                                                                                                           Number ──────────────── to
                                                                                  [F3]Delete ──────────── File name
                                                                                  [F4]Rename ──────────── File name
                                                        File management ──────── [F1]Format ──────────── [F1]No
                                                                                                          [F2]Yes
                          [F3]Initialize Setup menu ────── Initialize ──────────── [F1]All ────────────── [F1]No
                                                                                                          [F2]Yes
                                                                                  [F2]MediaSet ────────── [F1]No
                                                                                                          [F2]Yes
                                                                                  [F3]PrintMode ────────── [F1]No
                                                                                                          [F2]Yes
                                                                                  [F4]Command ─────────── [F1]No
                                                                                                          [F2]Yes
                                                        Initialize ──────────── [F1]Layout ────────────── [F1]No
                                                                                                          [F2]Yes
                                                                                  [F2]Func. ────────────── [F1]No
                                                                                                          [F2]Yes
                                                                                  [F3]Roll media ───────── [F1]No
                                                                                                          [F2]Yes
                                                                                  [F4]Interface ────────── [F1]No
                                                                                                          [F2]Yes
                                                        Initialize ──────────── [F1]Network ───────────── [F1]No
                                                                                                          [F2]Yes
                                                                                  [F2]Utility ─────────── [F1]No
                                                                                                          [F2]Yes
                                                                                  [F3]File management ──── [F1]No
                                                                                                          [F2]Yes
─ Setup menu ──────────── [F1]Data Dump ──────────────── [F1]Start/End
                                                        [F2]All
                          [F2]Long-term storage cleaning ─ Long-term storage ─── [F1]No
                                                         (      : PJ-1614NX        [F2]
                                                                                  [F3]Black
                                                                                  [F4]Cyan
                                                        Long-term storage ─── [F1]Magenta
                                                         (      : PJ-1614NX        [F2]Yellow
                                                        Long-term storage ─── [F1]No
                                                         (      : PJ-2216NX        [F2]
                                                                                  [F3]Black
                                                                                  [F4]Cyan
                                                        Long-term storage ─── [F1]Light cyan
                                                         (      : PJ-2216NX        [F2]Magenta
                                                                                  [F3]Light magenta
                                                                                  [F4]Yellow
```

MUTOH